Participant #1

1 - General organization/logistics

VERY organized beforehand, thank you!

2 - Location and venue, housing

Overall the location was great. The dorms were a bit far away but the accommodations were good. The food was fine. It might have been nice to have a small per diem to have a few meals outside of the cafeteria. Single rooms were definitely appreciated.

KITP was a good place for the lectures. Chairs with a desk or writing space might have been nice to enable note-taking. The wireless access at KITP was not great, which made some of the tutorials and the research week a bit more difficult. Downloading papers/projects/data was tricky, especially when lots of us were trying to do the same thing at once.

3 - Schedule

The daily schedule was nice. 9am is a reasonable start time. There were some isolated times where the CIDER schedule didn't mesh very well with our breakfast/dinner times, but presenters were pretty flexible so that was nice. The long lunch hour was definitely appreciated - the days where the lunch hour was shortened made it a lot harder to concentrate in the afternoon.

4 -Lecture content, level, pace, balance between lectures and tutorials

Overall the lectures were great. I think the lectures that started with the most basic concepts were especially appreciated. For equation-intensive lectures, taking the time to define every variable and keeping notation consistent from slide to slide would help a lot. It is easy to get lost in the numbers…

Two lectures a day was perfect. The days with two tutorials seemed rushed, but part of that was due to the incredible amount of research presentations we had. Perhaps for the next CIDER the afternoons could alternate between days with two tutorials and days with one tutorial plus a block of research presentations. The opportunity to give a ~15 min research presentation was great - it was enough time to get ideas out there and to get a lot of feedback, both in the immediate question/discussion period and throughout the workshop afterward.

5- Workshop format/organization

The workshop portion (week 3) was really motivating and energizing. Groups of ~8 people seemed ideal. It definitely helped the progress of the research to keep the groups interdisciplinary and to have at least two people from a discipline to aid discussion, rather than having one person representing an entire discipline for a group.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

The overlap of tutorial and workshop during week 2 was good. Three weeks total was a good time commitment. It might be nice to have an extra week to work on research - we got an incredible amount accomplished in a week but could have benefited from having another week together. The only danger I see with adding time (beyond the three weeks we had this year) is that it gets to be a big time commitment and I could see people who would be generally interested and excited about CIDER opting out of the opportunity due to the long time commitment.

Participant #2

1 - General organization/logistics

I have only been able to identify a few areas that I thought could use improvement, so I will focus on those here. However, overall I had an extremely positive experience at CIDER 06. It was very well organized, the lectures were at an appropriate level, and there were many opportunities to interact with the faculty, post-docs, and students. In other words, while my comments here may largely be of the negative variety, they're the exceptions; the total experience was great!

The wireless connection in KITP was essentially useless, and this was very frustrating, particularly for the tutorials. It would have been nice if most of us could have worked on our laptops together in the same room. It was very kind of the CIDER organizers to purchase Ethernet cables for us. More information about connectability prior to the meeting would have been useful (e.g., bring an Ethernet cable, etc.).

Since many of the tutorials relied upon Matlab, it would have been nice to know that in advance. I keep meaning to purchase it for my laptop, and certainly would have if I had known how useful it would be. The KITP computers were unusually slow for newish Macs.

The research presentations by the students and post-docs were very interesting, and many of them were quite relevant to the subject being discussed. Perhaps the next meeting could incorporate them more formally into the program. While they should still be optional, a brief abstract could be submitted a month or so in advance to allow the organizers to schedule them for an appropriate day/time. Also, 2-3 slides (as was suggested in the original email) is really not sufficient to say much meaningful about one's work. Maybe an AGU-style talk would be best, and then it would be clear that talks should be < 15 minutes.

I also think a poster session might be a good idea. That allows for more informal discussions about students' research, and general mingling between students and faculty (with beer?!) is always a good thing.

2 - Location and venue, housing

UCSB is an ideal location for the workshop. It is beautiful and everything was generally accessible. I liked the dorm room I was in very much (and I liked having a room to myself!). I thought the dining hall food was quite good for dining hall food, and I appreciated not having to eat out at a restaurant every night. The meals were a great opportunity to interact with other students and faculty members. Lunch was always extremely crowded and loud. Maybe next time the lunches could be scheduled at a less-congested time of day.

The space at KITP was fine. I wish the chairs had little desks attached, since most of us were taking notes through the lectures. The coffee-break space was great.

3 - Schedule

The daily schedule was a good one, and there was sufficient time for breaks. It can be difficult to find three free weeks in the summer (plus, it's difficult to get other work done during that time); however, I think the length of the program was quite reasonable.

4 -Lecture content, level, pace, balance between lectures and tutorials

Overall, I was impressed by the lectures. They were all clearly well thought out, organized, and targeted toward a "general" audience. Perhaps there could have been a little less background and a little more about current research in each field related to the TZ. Marc Hirschmann in particular did a very nice job of incorporating recent results in his talks. Perhaps the seismology talks could have been at a slightly slower pace for the non-specialists.

I thought the balance between tutorials and lectures was just right. Some of the tutorials were better than others. In particular, the mineral physics tutorials were excellent (Tom Duffy's especially). The seismology tutorials in general involved running programs without really understanding what was going on, which wasn't so satisfying.

5-We have been funded by NSF to do this again two years from now. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

I have listed most of my suggestions above. For the focus, perhaps the asthenosphere? Each discipline has some good observations of that area and it might be possible to actually make some sense out of them in a three-week period. For example, how thick are oceanic plates? How thick are continents? Is there melt in the LVZ?

Participant #3

1 - General organization/logistics

My one complaint with the organization is that the suggested reading materials should have been posted online more than a week prior to the beginning of the program. Other than that, I think everything was very well organized – emails along the way were very helpful, and I don't think I was ever left wondering what was going on/what I was supposed to be doing/where I was supposed to be going (except when trying to find the ice breaker the first evening!).

2 - Location and venue, housing

KITP was a great place to have the program, although a more reliable wireless net connection would have been very useful. The dorms had a great setup – I'd definitely be happy with staying in them again. The only problems that I had were with the dining halls. Many times the dining halls would be packed and it would be difficult to find a table. Maybe it would be possible to have one or two tables reserved for our group? Also, given the limited hours of the dining halls, and their distance from KITP, it would be good if more consideration were given to this fact. Generally, there was plenty of time to get from one to the other, but occasionally, lectures/tutorials were allowed to run over, making it a rush to get to meals – just be more mindful of this in the future.

3 – Schedule

I liked having both lectures and tutorials, but I think they could have been scheduled a bit better. One suggestion is to have a lecture and a tutorial in the morning, and a lecture and tutorial in the afternoon. I think this might help keep us focused on the tutorials a bit better. Secondly, I think it would be helpful to have the lectures and tutorials better paired, where a pair on the same topic happen in the same day. While I was left a little wiped out at the end of two weeks, I think that's probably a good thing!

4 -Lecture content, level, pace, balance between lectures and tutorials

I think the level could have been a bit higher than it was. Since there are people from all four disciplines, lots of introductory material is certainly very helpful for everyone. But, by the second week, it seemed like the lectures could have delved a little deeper into the topics. I do think I got more out of the lectures than the tutorials, but I don't think I could have been able to sit through more lectures every day (maybe adding the third lecture on the occasional afternoon would be a good compromise?)

5-We have been funded by NSF to do this again two years from now. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

I think KITP/UCSB is a great place to hold it again. The total duration of the program is good (it seems like the 3/4 week program a few years ago would have been too long, though I did not attend that one). Honestly, I can't think of any changes other than the ones that I've already mentioned to improve the program in the future.

Participant #4

1 - General organization/logistics
The catered dinners were a good idea, but the final week where the participants cooked seemed more effective in creating an environment where senior and non-senior participants interacted. It may be useful and more cost effective to just have picnics where the participants cook.

Given the popularity of giving research presentations among the graduate students and post-docs, it may be prudent to make the talks an open poster session or two instead. Posters could be in the courtyard or an appropriate room for the day and discussion could take place during our breaks. This would foster interaction between the participants as well as provide an opportunity to interact with participants from other programs at KITP. Another option is to request/submit talks during registration for the program so that the talks can be scheduled before arrival at the conference. This would allow the talks to be evenly spread over the 3 weeks. Also a strict AGU time limit should be enforced; not only does the time enforcement ensure adherence to the schedule, but also it provides practice for presentations at future conferences.

2 - Location and venue, housing
The housing worked out well for the participants; it may however be prudent to send an e-mail out including pertinent information about the dorms prior to arrival that is not an attachment. This would decrease that chance of any issues/problems that may arise (i.e. the necessity of bringing an Ethernet cord).

3 - Schedule
The schedule seemed to work very well except in the late evenings. Without a definitive ending time the end of the day and dinner for the non-senior participants sometimes overlapped. Given that the average commute to/from KITP to the dorms was ~15 minutes a later dinner hour or a definitive ending time would be greatly appreciated.

4 -Lecture content, level, pace, balance between lectures and tutorials

Lecture content and level seemed to vary with instructor/topic. In general, the seismology lectures seemed to focus on the derivation of methods and equations rather than demonstrating common methods applied to the data and application. This resulted in the seismologists in the group feeling as if they were back in a basic course and overwhelming the non-seismologist with equations without much explanation (i.e. not all the variables were defined in the talk). It may be better to give suggested reading on the derivations and focus on how seismologists apply different methods and the limitations/advantages of these methods (i.e. tomography, ScS/SS Precursors/other phases, array methods, receiver functions). This would provide tools for the participant to critically evaluate seismic studies in the future. This is an example of the type of level issues that can occur. The way I envisioned the tutorial is that it is a way to provide non-experts in a particular field tools to evaluate papers/findings/research talks outside of their field of expertise.

The tutorials need to be tested before they are used in the program for length, usability, and bugs. In general the tutorials were useful if only for the interaction between the participants, but I feel that they would be more useful if fully written/tested before the workshop.

5- Workshop format/organization
The workshop was very effective and useful. However, more time to work on the projects would be appreciated; one week of work seemed a bit short to accomplish what is necessary to have a well-organized project started.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
Overall, the tutorial/workshop was a great experience that provided an opportunity to both learn about fields outside my expertise as well as connect with people both outside and within my field that have similar research interests.

The mix of lecture and tutorial seemed balanced and well planned.

Suggested Focus: Lower Mantle and D”

Participant #5

1 - General organization/logistics

very good

2 - Location and venue, housing

Ok the location for the meetings. The housing was acceptable.

3 - Schedule

Perfect. We have the time to discuss with the others outside the conference room.

4 -Lecture content, level, pace, balance between lectures and tutorials

Sometimes was too basic (also tutorials). But I guess the learning process was a priority compared to research discussion. I think more room should be given to research talks and discussion from students.

5- Workshop format/organization

OK

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should

we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

The schedule is particularly good and favor ideas exchanges between the participants. The availability of office places was also very useful.
More space should be given to the research talks of the students. Discussion based on "young" researcher ideas may help to open new directions. I had the feeling that the talks were considered an exercise for PhD student more than research talks. Splitting in research group is OK as learning process, but 3 days should be enough to find common questions (answers require more than 7 days anyway) and possibly start collaborations.

Participant #6

1 - General organization/logistics: Good

2 - Location and venue, housing: The KITP provides a very comfortable working environment. Having a computer and a desk for myself has been very helpful. Unfortunately the UCSB campus is a bit isolated and after two weeks there, one feels a bit trapped. Housing and meals (dinner a bit early) were good.

3 – Schedule: Good

4 -Lecture content, level, pace, balance between lectures and tutorials: I enjoyed the lectures. Content, level and pace were adequate so that I could follow presentations not related to my field of expertise and learn from them. I have followed only few tutorials. Technical problems, unfamiliarity with the codes and topic, and limited time, prevented one to focus on the scientific message of the exercise. I think I would have learned more just following a session demonstration by the instructor, who should however still provide the used codes to interested students to play around.

5- Workshop format/organization:
The workshop part has been very profitable, though rather short, limiting what could be done. I particularly enjoyed discussion with students (especially from other disciplines) in my group, where I feel I learned more than during the tutorials. I think this part should be extended, at the expenses of the tutorials. I think it is particularly important to make sure that there is a mixed group of expertise in each group.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
Although I have been impressed by the student research talks, I think that posters (exposed during the entire program) rather than oral presentations would allow more discussion and interaction.

Participant #7

1 - General organization/logistics

-Getting everything set up was fairly straightforward, Jenny was very helpful in getting my flight arranged. It would have been nice though if we could have known better when to leave, it seems some people left on Friday and others had to wait until Sunday.
-wrt the general organization of the meeting, It seemed that most things went smoothly, and there was little inconvenience for participants.

2 - Location and venue, housing

-The location was very nice, UCSB has a pretty campus and location. The dorms seemed fairly modern and in good shape. It was nice not having to share a room with anyone, and bathrooms were also not overcrowded.

-KITP was a very nice institute, a nice facility for research, with several major exceptions: 1. the wireless internet was horrible. It would be nice if there were several routers providing service, so that you could actually do something online. 2. The computer network was extremely poorly maintained, it was difficult to run code without crashing the machines. The reliance on macs in general and the fact that we had to run tutorial codes on their machines made things very difficult (more below, probably). 3. of lesser importance, office space for students was not great, and we had no after-hours access.

-A final point: faculty and students were segregated, and this did not afford much after-hours mingling, which was disappointing. It is nice to get to meet with faculty more personally.

3 – Schedule
The schedule changed a lot, and it was very unclear at the beginning what the third week was going to entail. Additionally, I would strongly recommend reformatting the program to consist of talks in the mornings and evenings, with the afternoons off. This would allow people to get outside during daylight, a necessity for such a grueling 3 week schedule. Also, start lectures on Saturday a little later.

4 -Lecture content, level, pace, balance between lectures and tutorials

-The lectures in general were very well done – it was clear that faculty members had put a lot of time into trying to explain the big picture problems and concepts to students. The tutorials, on the other hand, seemed (with exceptions) pretty disorganized. This wasn't helped by the fact that the computer network support was lousy.

-Additionally, it is not very reasonable to assume that most students had mac's. It was more 50-50 (which isn't bad considering apple has 4% market share). Please design tutorials in the future to be platform independent, ie if there is code we should have to compile it ourselves. It would also be nice to have the code etc posted before the

workshop so that we could work out any problems before hand instead of during the 1 hr time period.

-In general, I felt that the tutorial time was mostly wasted. It was more interesting watching the "walk through" before and after.

5- Workshop format/organisation

-I think that the first 2 weeks of the program served as a very nice presentation for graduate students of the major areas of research/problems in our field, and certainly helps make students aware of the interdisciplinary nature of geophysics. I feel that the last week of the program was less interesting for me as a graduate student, because I already have projects that I'm working on and will probably not be able to contribute more to a grant or project at the current time. It probably nicer for the post-docs who are looking for practical ideas for funding, etc. It might be better, in this respect, if the program were to be made longer, to have younger students who's long term research would benefit more from the program.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

-I think that the talks were very good for the most part, and would not change them significantly. They were in fact very general and not necessarily focused on the Transition Zone (which I thought was good). However, next time , I would keep the general background talks, but scrap the tutorials. Instead, I would let the afternoon sessions be more dedicated to specific/practical research talks involving the subjects talked about in the morning. Ie. In the morning, you get "This is Geochemistry" and in the afternoon you get "This is how Geochemistry helps us solve this particular problem".

For topics, I would recommend the the lithosphere/aesthenosphere (many interdisciplinary problems in chemistry, seismology, and dynamics).

Participant #8

1 - General organization/logistics
The event was extremely well organized. Even when they had to improvise things along the way, they did an excellent job.

2 - Location and venue, housing
The place is ideal for this kind of events. The rooms are comfortable, bathrooms are clean and there is a good variety of food in the dining halls.

3 - Schedule
Overall, it was very well planed. However, it was very condensed (many activities in a very short time). Having some more time for the tutorials would have been helpful.

4 -Lecture content, level, pace, balance between lectures and tutorials
Some lectures went to a lot of detail very quickly and the non-experts had problems to digest the information. The tutorials helped a lot to get the big picture of the lectures. I would say lectures should be more general and more time should be spent in the tutorials.

5-We have been funded by NSF to do this again two years from now. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
The logistics was very good and I don't think improvements are necessary.
I think there should be more time for tutorials and less for lectures.
It is important that people keep in mind that this is a multidisciplinary approach to a very complex subject, and some people have to struggle to understand just the basics of areas that are not part of their current research. I think more work should be done in order to get the speakers to present the broad picture first and then they can spend some time talking about more detailed analysis.

Participant #9

1 - General organization/logistics
- There was good communication between participants and Jenny Pehl before the conference. She was very helpful and promptly responded to logistical queries.

2 - Location and venue, housing
- Santa Barbara is relatively easy to get to and there are efficient shuttle between SB and LAX to aid international travelers.
- KITP needs a better wireless network, as everyone experienced.
- An issue at the residence hall was the timing of dinners. They were much too early in that sometimes our work would run into dinner time (5-6 or 530-630). Lunch was relatively late, making dinner even more inconvenient. A later time of (630-730) would benefit working hours at KITP – especially in the workshop portion of the program.

3 – Schedule
- It may be helpful to switch the format of the tutorial week. Two tutorials in the afternoon sometimes were a bit much. Instead, why not have a lecture and the tutorial relating to it in the morning and then another lecture and tutorial in the afternoon. This would split up the tutorial marathons and have the participants work on material that is fresh in their minds.
- The workshop aspect of the program should perhaps be introduced sooner. From the first day (?) a list of project to consider could be posted to get participants to start thinking.

4 -Lecture content, level, pace, balance between lectures and tutorials
- Lecture content of mineral physics was particularly appropriate in terms of level and particularly well-presented and meshed nicely into the tutorials. These lectures were also presented in the most relevant context to the focus of the workshop.

- Seismology lectures were perhaps a little theory and equation heavy for those that don't have that vocabulary. More explanation of physical meaning of the equations would be helpful. This was done well in the receiver functions lecture.
- Geochemistry was pitched at an appropriate level, although perhaps too much was attempted to be fit into the lectures that was not immediately relevant to the focus of the workshop.
- Geodynamics lectures were at an appropriate level and the tutorials were interesting.

5- Workshop format/organization

- If the format of subsequent CIDER's is 3 weeks, then the group projects should be introduced earlier.
- Encouraging each discipline to be represented in all groups would be helpful to avoid concentration of one discipline on a particular project.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

Social Aspects

- To facilitate interaction between students and lecturers, closer housing for the two groups should be investigated. Interaction between the two groups effectively stopped at dinner time except for those occasions when there was a beach bbq – which everyone enjoyed

Program Focus

- Core-mantle interaction
- Lower mantle signatures and properties
- Shallow Crustal delamination

Participant #10

1 - General organization/logistics

2 - Location and venue, housing

3 - Schedule

4 -Lecture content, level, pace, balance between lectures and tutorials

5- Workshop format/organisation

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

1. Clear organization and logistics. The announcement about bringing a presentation was on a little short notice.

2. The location was very nice and inspiring. Pleasant and clean housing, the presence of a common room was nice and good for getting to know each other, as were the group dinners and the sports field in front of the common's.
3. Good balance between workshop/free time. After two weeks of lectures, it was getting harder to keep focused, so it was good that the workshop part started then.
4. Excellent lecture content, with some very good review talks and clear and pleasant speakers. Some of the seismology lectures were a little too specific/high level for a mixed audience. Lectures were not too long, and the relatively long time for discussion was useful. The right amount of time was taken for the tutorials. They succeeded in giving you a quick look at the tools and methods in a specific research field and the lectures served as a good introduction. Sometimes, too much time was lost on installations/downloads that didn't work at once.
5. Interesting ideas and discussions came up and results were of high standard. A little more time (say two weeks) would allow more time for group discussions and maybe to have more interaction between the separate groups, as the subjects are closely related. This year's workshop presentations / AGU poster can serve as a nice example for CIDER 2008 participants.
6. Keep the same: a group of inspiring speakers, short student presentations, the size of the group, the barbeques. I liked the three week period over other meetings that last just one week, because it gives you enough time to talk with people more than just once or twice. More than 3 or 4 weeks would not be of interest for me, but maybe for others it would.
7. Multi-discipline subjects, such as lithosphere dynamics, continent formation processes, effects of water and melt in the mantle, thermal evolution of the Earth.
8. Overall, I am very glad to have attended CIDER, thank you for organising!

Participant # 11

1 - General organization/logistics

I really like this program, and it is really great to gather people from different fields and discuss the same topic. Although we debate sometimes, I do learn a lot.

2 - Location and venue, housing

I like UCSB and satisfy with my room.

3 ˆ Schedule

Most of parts are great, just the whole program takes a little longer. For me, I wish I could stay for 3 weeks, but I don,t have time. So, I was wondering if we could make the program shorter, but we could do more per day, let,s say, maybe start at 8am and end at 6pm everyday.

4 -Lecture content, level, pace, balance between lectures and tutorials

I like the current format, just for tutorials, I feel I don,t learn enough in 1.5 hours. Could we have longer time for tutorials?

5-We have been funded by NSF to do this again two years from now. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

Personally, I,m interested in Lower Mantle.

Participant # 12

1 - General organization/logistics

Very well organized, ran smoothly.

2 - Location and venue, housing

Dorm accommodation was good, dining facilities rather crowded though. KITP is a great venue, but the lack of a usable wireless connection in seminar rooms made for much frustration, especially during tutorials. Why have wireless if no one can use it?

3 - Schedule

Schedule was good.

4 -Lecture content, level, pace, balance between lectures and tutorials

Most lectures were excellent, especially those on geodynamics and mineral physics. The wide range in tutorials is a good idea, if they are well designed, since it gives a good overview of what the various fields actually do, and what problems they have to deal with. I felt that some of the receiver function tutorials did not meet these standards though.

5- Workshop format/organisation

I felt as if the workshop ended before it really got started. Having the first week overlap with the tutorial works well, but one week is not enough to really attack a problem.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

Thermal state of the mantle, maybe?

Participant #13

1 - General organization/logistics

Good.

2 - Location and venue, housing

Student housing is a bit far away from the KITP. The seats in the conference room are not comfortable for taking notes.

3 – Schedule

It would be nice if student's presentation can be scheduled in the earlier weeks and each talk should be short (~15 min). In addition, I would suggest a different schedule: Lecture-Tutorial-Lunch-Lecture-Tutorial/Presentation.

4 -Lecture content, level, pace, balance between lectures and tutorials

In general, the content is fine. For some of the lectures, the pace seems to be too fast to follow especially for students who are not familiar that in field. However, I found that the reference papers recommended on the CIDER website are very useful. It would be good if next time the reference papers can be marked according to their relevance to the topics being taught. Also, the instructors should provide the reading lists as earlier as possible.

Some of the tutorials can be improved with more specific instructions/questions. Grouping students from different disciplines and keeping them at nearby rooms would be helpful too. It looks like the overall design of KITP is not particularly good for tutorial purposes.

5- Workshop format/organization

It is good that people are grouped based on topics in interest. However the group forming was rather late, which ended up with only about four days left to work on the project.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

Participant #14

1 - General organization/logistics
The program is organized very well. Every thing is OK with logistics.
2 - Location and venue, housing
Santa Barbara is one of the most beautiful places I have ever stayed. The dorms we are living in are very near the ocean. To hold a summer school here is a very good choice since we can not only learn a lot of things, but have a good rest.

3 - Schedule
The schedule is reasonable.
4 -Lecture content, level, pace, balance between lectures and tutorials
The lecture contents and levels are appropriate for graduate students. Admittedly, I didn't learn much from the tutorials. I don't know if it is because of my own problem, but I think I only know how to run a program after some tutorial and don't know what the results mean. The forms of tutorial may need to change a little bit, although I don't know how.

5-We have been funded by NSF to do this again two years from now. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
Using multiple disciplines to study the earth is a very good thing. For next program, I think we should focus on broader regions in the mantle, instead of only focusing on the transition zones. For example, the deep mantle heterogeneities and the D" layer are also very interesting zones for all the fields: seismology, geodynamics, mineralogy and geochemistry. It will be better if we can include them in this program.

Participant # 15

1 - General organization/logistics
The conference is organized very well. We have pick-up, which is very helpful for the first arrival. And the picnics are great, which shorten participants' distance. However, the meals in the dinning room are always same. We all lost interest in it in the last several days.

2 - Location and venue, housing
I like the location by the beach. But the conference room is too far away from where we lived.

3 - Schedule
Honestly speaking, the schedule is too tight. In the first week, we could insist on listening, but in the second week, we are a little tired. The tutorial part, I suggest the background theory should be introduced.

4 -Lecture content, level, pace, balance between lectures and tutorials
The content is ok, which covers almost all fields related to transition zone. In the meantime, it is extended to deep earth. This is very helpful for student to understand what the people in other fields think about the same question.
Well, for the tutorial parts, I think one afternoon is not enough for us to learn and master one way, maybe we could have more practice and use it to work on some project.

5-We have been funded by NSF to do this again two years from now. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
I suggest that the topic which could take all fields together should be chosen, e.g. the slab in the mantle, how does it detach and debris remix. I believe people will be interested in it.

Participant #16

Please provide your candid comments on the following - and any other - aspects of the program:

1 - General organization/logistics
It is nice.

2 - Location and venue, housing
Very nice

3 - Schedule
I hope the research presentations can be pushed into the first two weeks or we have a poster section.

4 -Lecture content, level, pace, balance between lectures and tutorials
Lectures are fine. For tutorial, more fundmental introduction may be helpful, since we come from different fields.

5- Workshop format/organisation
It is fine, but the time is too short.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
I think upper mantle temperature and compostion are very interesting

---

Participant # 17

1 - General organization/logistics
the workshop is well organized.

2 - Location and venue, housing
great place to hold this metg.

3 – Schedule
Overall, it's intensive and a rich body of front research results has been presented.

4 -Lecture content, level, pace, balance between lectures and tutorials

Very well illustrated usually. Instructors have been very serious and knowledgeable about the work.

5-We have been funded by NSF to do this again two years from now. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

I learned quite a bit in this workshop. It brings together experts in different areas into one arena and provides opportunity to talk with them.

Participant # 18

1 - General organization/logistics
Everything was well organized.

2 - Location and venue, housing
The dorms were really nice and the location, in general, was great. I have absolutely no complaints on that front. My only complaint about the venue is that the wireless was bad and that the computers were really slow. The Macs had 460 MHz processors, which is rather pathetic for a physics institute.

3 – Schedule
Rather than having scheduled grad student talks, there should have been a couple of poster sessions. It would have allowed people to ask more questions and mix more. It was also hard to fit in all the talks and during the last week, they really just cut into research time.
I also wonder if it would have been possible to shift the entire schedule back by half an hour. This would have given students more than half an hour for breakfast and allowed us to eat in the dining halls when they were less buy. Otherwise, I wonder if it would be possible to have reserved CIDER tables to ensure that we could sit next to each other at meal times.
The schedule that was set was really nice, but not always followed. While I understand that things sometimes go overtime, scheduled breaks are important. It becomes hard to function without them. So it might be nice to stick to the schedule as much as possible, although generally, I think they did a good job. Also, the professors didn't always seem to understand that the dorms were a 20 min. walk away from KITP and that the cafeteria closed at 6.30, so that staying too late could mean missing dinner.

4 -Lecture content, level, pace, balance between lectures and tutorials
The lectures were generally good. I really liked the format of the geodynamics tutorials and suggest that future tutorials be modeled after them. Some of the geochemistry tutorials seemed to mainly involve cutting and pasting in Excel and I don't feel I learned very much from them. Also, it would be nice if tutorials were more thoroughly tested ahead of time, since they frequently didn't work or were hard to download.

5- Workshop format/organization
I think there should have been another week of workshop, so that the entire program was 4 weeks long. However, it was good that there was some overlap, because it allowed the tutorial participants and the workshop participants to get to know each other.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

I think a CMB focus for the next program would be nice. Otherwise, I don't think I would change very much. I thought the program was set up very well.

Participant # 19

1 - General organization/logistics
The general organization was very good. The only logistical change which I would recommend is that students were originally told to stay through the final Saturday at the end of the conference, which seemed unnecessary.

2 - Location and venue, housing
UCSB was a good location for the workshop. The dorm housing was very adequate and provided good communal space for the students. My only complaint would be about the food – the dorm food was not very good and slightly repetative. It would have been nice to have a few nights/weekends to eat elsewhere.

3 - Schedule
The schedule was good. It would have been good to have a beer hour on some nights and the ability to work slightly later. The dorm food schedule meant that some sessions had to be cut short.

4 -Lecture content, level, pace, balance between lectures and tutorials
The lecture level/content/pace/balance were generally very good. The tutorials were also very good, but more time would have been useful for most of them. The summing up session at the end of the tutorials was useful, but did not always take place. To fit two tutorials into an afternoon, the day needs to be extended past 5pm.

5- Workshop format/organisation
The workshop format was good. However, prior to choosing topics, it might have been useful to break into smaller groups to discuss the ideas in more detail.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
I think that the next program should be similar in format. Three weeks was a large time commitment. Prior to attending the tutorial, it is difficult to assess how relevant the workshop section will be to a particular students interests and thus whether it is worthwhile for them to attend the workshop. An interesting focus for the next workshop would be the lower mantle, as there are many questions about it which could benefit from an interdisciplinary approach.

Participant # 20

1 - General organization/logistics
I thought the overall organization and logistics were good. I knew what was supposed to be going on before I got to SB. The website was wonderful for the schedule updates!

2 - Location and venue, housing
SB was very nice as were the dorms. The food in the cafeteria got very monotonous. I think that having lunch at the dining wall was good for keeping everyone together and encouraging discussion, but perhaps there could be more options (such as eating in town) for dinner and breakfast (although the dining hall was very convenient for breakfast too).

3 - Schedule
There wasn't enough time for some of the tutorials but part of that was the time needed to setup/download/debug the programs. If this was available the day before or at least before lunch, than more time could be spent on the actual tutorials.

4 -Lecture content, level, pace, balance between lectures and tutorials
I think that some of the lectures (especially in seismology) were very advanced. The mineral chemistry ones tended to be the most informative for me.
The pace was good and the balance between lectures and tutorials was adequate.

5- Workshop format/organisation
Good. Once again, the website was key to updates!

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
Remind students/post-docs staying in the dorms to bring Ethernet cables!
The catered bbqs were ok but the student-run bbq was even better; this would make a great option for the second and/or third week after people have gotten settled in. I think that having a lower mantle focus is good but perhaps limiting. (But I guess the mantle transition zone is a bit tight too!). I certainly would be interested in the lower mantle even if I am not currently doing research on it.

Participant # 21

1 - General organization/logistics
Overall, things seemed to run smoothly. I thought it was great that things could change on the fly. My only request in the future would be for individuals running tutorials to test then a bit more. Ask a few students to just install and run the codes.

2 - Location and venue, housing
Great. I thought the location, venue and student housing were great. My only recommendation would be to request fans for the rooms next time around.

3 - Schedule
Overall, it was great. For a workshop as long as it was, the breaks were a good length. The lecture and tutorial mix broke the day up a bit as well.

4 -Lecture content, level, pace, balance between lectures and tutorials
Overall, good. I thought the balance of lectures and tutorials was good. The levels of the lectures seemed to vary which was at times appropriate.

5- Workshop format/organization
My only suggestion would be to start the collaboration earlier. That would let those staying the full time have a head start and would also let those that are leaving participate a bit. If they can't stay, they could still work from their home institution and participate effectively.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
The big things I would change would be to start the collaboration earlier. I would also recommend trying to make the tutorials run a bit smoother in terms of codes working. Make sure a handful of people have the codes working the day or morning before.

As for focus, I could see subduction zone being a great topic for the types of collaboration that are being done. There are tons of questions to approach and a large population working on the problems remotely.

Participant # 22

1 - General organization/logistics

Everything went well in this area. Having students give a poster session the second or first day might be useful – to introduce what area each is concentrating on without needing extra time for more presentations and then – although these should be left up for the participants who come later… and maybe located around the area where coffee breaks are, as to spur discussions.

2 - Location and venue, housing

Good, good & good. You might place students who like to go to bed early further from the lounge area.

3 - Schedule

Good – maybe it would help to use the tutorials to break up the lectures (ie lecture, tutorial, lecture).

4 -Lecture content, level, pace, balance between lectures and tutorials

All of these were good. Having the talks recorded and posted online is really great.

5- Workshop format/organization

This worked well. It might be useful to introduce small groups earlier in the program, not to have major work sessions, but just to toss around ideas & then leave the final week (as is) for more serious concentration on projects.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

A mini field trip for the icebreaker (vineyard tour?, trip to the zoo?, trip to the Santa Barbara pier? something like that, etc). Try to get everyone together in an outside location, instead of staying on/near campus for most of the non-tutorial/workshop time. Even if the Wed BBQ's could be at a location further from campus, it might give less of a chance for groups to head back to the dorms early and give some more cohesion to the group.

For lunch together have everyone sit at the same couple tables or in a reserved section of the cafeteria – this might help promote more interaction among the group during this time.

You could have one or two students invited to dine with the faculty each evening, to get some more individual interaction – not sure if this would be too complicated logistically, the same goal might be accomplished with a more private/sectioned lunching area.

Start small groups early in the first few days of the meeting (I mentioned this already).

Maybe use a couple grad student/post-doc participants from previous years to help organize events – this would lessen the workload for faculty organizers and provide easy access to previous student/post-doc experiences.

Future focus ideas: Subduction Zones, D'' region and Core-Mantle Boundary, Rheology and Lithosphere/Upper Mantle.

Participant # 23

1 - General organization/logistics

Everything was well handled

2 - Location and venue, housing

Fine

3 - Schedule

The schedule was a bit intense, by the end of the second week I was totally worn out. I think it would be a good idea to cut back to 1, maybe longer, tutorial in the afternoon. Also, the student presentations were nice, but they added onto already really long days. It was especially difficult when whenever it looked like there might be a free, unscheduled moment a student presentation was added in.

4 -Lecture content, level, pace, balance between lectures and tutorials

5- Workshop format/organization

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

Participant # 24

1 - General organization/logistics
fantastic – I had no problems of any sort

2 - Location and venue, housing
fantastic

3 - Schedule
very good

4 -Lecture content, level, pace, balance between lectures and tutorials

everything perfect – probably the only thing…
all the tutorials were intended as a complex problem solved in 2-3 hours thanks to a given program written by the tutor. This was usefull because we could follow in the program the method and we could have access to more complicated problems in the same time.
I actually like also the "old school" tutorials, where the problem is very simplified in order to make students solve the problem in 2-3 hours from zero.
Ex: In Stixrude tutorial, we computed on different temperatures the physical properties understanding what does it mean to calculate phase stability, from this the physical properties and how pressure and temperature (and composition) change the solution.
A possible alternative is to assume that the mantle is composed only by Mg-perovskite and calculate by hands all the physical properties of the mantle.
I actually think that a very nice thing could be to propose both the kind of tutorials made by the same tutor…

5- Workshop format/organization
perfect

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

Temperature in the mantle.

Temperature is studied in different zones of the mantle with many different independent methods:

- geochemistry
- mineralogy (ex: post-spinel transformation -> temperature at 660km) + adiabaticity
- seismology (coupled with mineral physics: ex: width of the transition zone and many others)
- geodynamics (mantle convections give as a result the 3D temperature field + non-adiabaticity)

Participant # 25

1 - General organization/logistics

Very good organization;

2 - Location and venue, housing

UCSB/KITP is a good location; housing is adequate;

3 - Schedule

Good mixture of lectures and tutorials; however, schedule changes were a little too frequent; 3 weeks in total was just right;

4 -Lecture content, level, pace, balance between lectures and tutorials

Generally, good lectures; however, in particular some of the seismology lectures were lacking some effort to make them understandable to the non-seismology general audience; I don't think it helps the general audience if a bunch of slides with equations is presented (those might go into a handout); instead, I'd prefer an approach based more on results, and what these can and cannot tell us.
Balance between lectures and tutorials was good; the tutorials were sometimes too short, partly because of problems with accessing and downloading the software.
It is an excellent idea to have the lecture slides accessible on the internet.

5- Workshop format/organization

Good.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

It may be an idea to have the research talks more at the beginning, so that people are aware what the others are doing; could be problem with available time, though.

Participant # 26

1 - General organization/logistics

2 - Location and venue, housing
The housing was nice, but pretty far from KITP. I know that can't be helped, but bikes are definitely advisable!

3 - Schedule
The daily schedule was fine.

4 -Lecture content, level, pace, balance between lectures and tutorials
From what I saw, the tutorials were not as well put-together as those of CIDER I. I think some instructors miss the balance that a tutorial should have. The instructions have to be very explicit so that a novice can get started and accomplish something in a short amount of time. However, they also need to be able to be modified by those with a more advanced understanding in order to get interesting results. Some instructors pick something too simple, usually from a class, which is finished quickly and not very insightful which doesn't spark collaboration among the students. Some tutorials were a bit too complex such that a novice gets frustrated and doesn't actually learn much about the topic. I would say that if one was to give examples of good tutorials, they should refer to those used in CIDER I, not CIDER II.

5- Workshop format/organization
More time is needed for the research portion of the workshop. One week just isn't enough. By the time everyone is beginning to be productive, it is time to leave.

The student presentations were just too distracting from the research. I think it is nice for the students to share what they are working on, but maybe in a more time efficient manner. Like a lunch talk with a geochemistry theme and everyone has 5 minutes, something like that.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
Well CIDER has concentrated on the transition zone and the lower mantle, why not the mid-mantle?

Participant # 27

1 - General organization/logistics
Excellent

2 - Location and venue, housing
Excellent

3 - Schedule
Very convenient.

4 -Lecture content, level, pace, balance between lectures and tutorials

First order: very nice lecture content and style. In detail: I think the scope of the tutorial is broad and draws on a range of basic science/math topics. Most instructors have done a wonderful job in catering to a wide audience. However, in such a short span it is almost impossible to satisfy such a diverse community (geochemists, mineral-physicists, seismologists and geodynamicists). Although these basic science and math is expected of all student and post-docs, a refresher or a second pass will certainly be beneficial for a better appreciation. I think, one or two lecture and perhaps a tutorial on some background maths/science (which would be a relevant tool in the subsequent lectures), would be appreciated by many.

5- Workshop format/organization
I did not attend the workshop and hence I am not in a position to make any comment.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

I would be interested in attending a tutorial-workshop on our present state of knowledge on lower-mantle, D" layer and the core, this would be a deep-earth extension from the transition zone.

Participant # 28

1 - General organization/logistics
Very Good.

2 - Location and venue, housing
Very Good – But housing and workshop area should in very close distance. I had difficulty to go on my study after workshop hours, especially nighttime.

3 - Schedule
Very Good.

4 -Lecture content, level, pace, balance between lectures and tutorials
Generally good. Level of lectures must be more simplified to understand fundamentals and underlying theories -

5- Workshop format/organization
Very Good

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should

we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

a) COMPUTER FACILITY must be checked earlier if they are good enough to cover workshop material.
b) MAC and PC based computer usage: We were almost pushed to use MAC- which I never use. I had difficulty adopting myself to MAC environment that disturbed my focus during the workshop exercises.
c) Last week group work must be efficiently handled. Students left earlier did not have any chance to get in the groups formed in the last week (3rd week).
d) During the group work, group members should do the literature review with guidance of lecturers- this was done well. But one issue during the group work I did not like; for example, late joined person from a local university tried to pull all group attention to her research. This gave me a feeling that I am there to help improve her project. And, her continues talking did not give another person in the group chance to lay out her/his ideas. So, to prevent this group leader should be careful about time management to give everyone chance to speak up his/her ideas. In short, group work was perfect idea, however, efficient team work method should be well known (at least) by the group leader.
e) I also suggest a preparation of person/task, person/skills, person/current project and person/topic (maybe in more detail sections) matrices. By looking at these matrices group leaders or group members would know who could do what to solve the deep earth problem raised during the group study.

Participant # 29

1 - General organization/logistics

Well organized. Excellent program. Perhaps start a tradition of student-lead BBQ?

2 - Location and venue, housing

Housing was fine, but the cafeteria food was pretty hard on a lot of the students (digestive issues). Perhaps we could get housing without having to eat in the dining halls?

3 - Schedule

Just right. I heard rumors of a longer program in the future. This would be a bit much, I think.

4 -Lecture content, level, pace, balance between lectures and tutorials

As a geochemistry student, I found the seismology lectures to be incredible dense. However, Dr. Sheehan have an excellent, easily comprehensible lecture. Perhaps other seismology lectures could be made as easily comprehensible?

5- Workshop format/organization

Excellent combination of lectures and tutorials. Perhaps budget more time up front for student talks? Clearly the student talks were more popular than what was originally assumed?

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

See above. Perhaps we could discuss subduction zones? This would tie in well with this year's them of Transition Zone topics.

Participant # 30

1 - General organization/logistics

The event was definitely well organized. Students were informed about the formalities and modus operandi. No complaints.

2 - Location and venue, housing

KITP is probably the best place to have the program, however, the walk from the student housing to the seminar room is unreasonable

3 - Schedule

I was very pleased with the scheduling can't think of ways on improving it. There was just enough time between lectures to refresh oneself or ask the lecturer that nagging question over a cup of coffee.

4 -Lecture content, level, pace, balance between lectures and tutorials

I wasn't very pleased with this part of the program. Tutorials were quite useless the way they were conducted. I don't believe it is possible to learn anything about a tool in a couple of hours. For example I being a geophysicist will never use a XRD analysis tool (even if I did I could learn it in a matter of hours or a day at maximum) or for that matter a geochemist will never use Citcom and even if he wanted to it would take him a couple of hours to learn it. It is very impractical to train people individually on black boxes. A team of different expertises forced to use 3 different tools to make a project would be a better idea. Also the lectures weren't too interesting save for a few Prof Strixrude was superb. People in geophysics have seen too many equations and aren't least interested in seeing them again and people outside of it are overwhelmed. I believe Prof Kellogg did a great job at explaining. Lectures should be more focused on what we know, how we know, when would our inferences be wrong. I don't think anybody covered that part. For eg :- Existence and uniqueness of solutions, order and accuracy of numerical solutions etc. Non geophysicists must be told what a slippery slope modeling is and just as unequivocally geophysicists must be reminded of how great a problem geochemists and petrologists face with mixing and contamination for example. I believe the more we know about the mistakes one can make the better we get at doing science.

5- Workshop format/organization

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?

I believe Geology is becoming highly diverse as a discipline. I would ensure a equal number of participants from geophysics, seismology, petrology and geochemistry. Once this is done we would also need a equal number of experts(faculty members and post-docs) to make groups with the same distribution of expertise. Scrap the tutorial and make them work on a project from day one or two. At the end of the first week each group will give a 10 minute presentation on what they propose to do over the course of the next two weeks, what are the tools they require? What are the major hurdles and what are common sources of error? Who is going to benefit from this project or what are we going to understand/help explain. At the end of the second week have another presentation of the progress made. The final presentation can be made on the last day of the program with whatever they have been able to accomplish and future work they wish to collaborate upon. The importance of the presentations is that a audience base of peers and experts/future employers who are quite possibly judging you, ensures that people strive to do as much work as possible and do not slack off.

Of course there might be loop holes and anti-thesis to what I have suggested but it is the responsibility of the committee to fine tune or come up with a better alternative.

Participant # 31

1 General organization/logistics

The organization of the CIDER program was excellent. However, it would have been better to provide students with a card or key to get access to KITP, specially for stude nts that did not bring computers, so we can go to KITP anytime and do some work.

2 Location and venue, housing

KITP is a great place for conferences and workshops. I really liked it. About the housing, The rooms provided were clean and nice. The only problem I had with housing was the use of the restaurant. It was unpredictable when it opens early and when late. On the othe r hand, since we have to be at KITP and 9:00 am and the restaurant opens 8:00 am, I missed some breakfasts in order to arrive early and check my emails, print some paper,etc . In other cases, I had to eat really fast in order to get to KITP on time.

3 Schedule

In general, the schedule was well organized. However, since there was too much information provided and in some cases we are not familiar with the topic. I was thinking that it could have been better to have a lecture followed by a tutorial because normally the tutorials were based on the lecture we had the same day so we can better understand the theory with a practical application.

4 Lecture content, level, pace, balance between lectures and tutorials

The selected lectures during the program was unique however I would have liked to hear about anisotropy at the transition zone. The level of the lectures was appropriate althoug h in some cases it was difficult to understand because I was not familiar with the research area. The tutorials were really useful however we did not finish some of them because of the time. In general, lectures and tutorials were really interesting and enriching.
5 Workshop format/organization

Not applicable since I was not in the Workshop part of the CIDER Program.

6We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/postdocs? What might be the focus of the next program?

CIDER program was a great experience for me, not only I met lots of people and made friends, but it was an enriching experience. I think CIDER program is a good opportunity for students to be involved in different research areas and get new ideas. I returned to my University really motivated. So, I think CIDER should continue providing tutorials and workshops. The organization of the program was unique it should continue like that.

Participant # 32

1 - General organization/logistics

The organization is very good and professional. Logistics are quite reasonable.

2 - Location and venue, housing

UCSB campus is very nice and comfortable. Housing and venue are also quite good. I really enjoy living there.

3 – Schedule

Schedule is reasonable. But I felt that if I can focus on one thing at a time, that will be much helpful to me to learn.

4 -Lecture content, level, pace, balance between lectures and tutorials

Lecture content is well-covered in geodynamics, mineral physics, seismology, and geochemistry. The level is very high. I have been able to interact with many famous scientists that I can not otherwise have opportunity to meet and talk. The balance between lectures and tutorials are quite good, I felt I learned a lot from this workshop. However, some of the tutorials are not as successful as expected due to limited amount of internet access, calculation recourses. Also, the time for tutorials is a bit short.

5- Workshop format/organization

Workshop format of lectures, talks and tutorials is a good way of learning. I particularly love the interaction between students in different disciplines, and work on the mutually interested problems.

6-We have been funded by NSF to do this again two years from now and KITP has agreed to host the program. What do you think we should do the same and what should we do differently for the next generation of grad students/post-docs? What might be the focus of the next program?
Doing the same but with some improvement on highlighting the interaction between faculties and students is ideal. I would suggest the focus of the next program could be interaction between mantle and crust.