Proposal for a Program on
<TITLE>

1. Organizing committee: List the program organizers, their affiliations, and their anticipated length of stay.

Note: All programs must have at least three organizers in residence for the duration of the program. We strongly recommend that at least two organizers be US-based mathematicians, and that at least two organizers be women. Because MSRI is funded by the (US) National Science Foundation, it is important that MSRI's programs be composed of 60% or more US participants. Also, in our experience, when there are female mathematicians on an organizing committee, it generates a more diverse list of applicants and participants. This phenomenon is consistent with a large American Mathematical Society study, which found a strong correlation between the number of women organizers and the number of women speakers and participants in AMS special sessions.

2. Preferred Semester(s): Indicate your preferred semester, as well as several alternative semesters.

3. Companion Program(s): List proposed companion programs, potential organizers, and describe the ways in which the suggested companion program would pair well with your proposed program.

4. Scientific Description: The description should include a background of the topic, relationships with other parts of mathematics or other disciplines, goals and areas of potential progress, an outline of the proposed program's structure, proposed involvement of postdocs and interactions with other scientists, and why the proposal is particularly suited to MSRI. It is highly desirable that the program show the breadth of the mathematical field being treated, and take into special account its relation to other fields of mathematics and (in appropriate cases) other sciences and engineering.

5. Related Programs:
Here one should list all programs, especially those held at US Math Institutes, that may have intersection with the proposed program. The intersection with your program should be explained as well as how your program would differ from the others and how strong is the intersection. If some programs seem to be intersecting yours but are quite different it is good to mention it.

6. Key Participants:
A spreadsheet of potential participants containing, for each participant, the Family Name, First Name, Email address, Home Institution, Country of Home Institution, Gender, if US citizen minority status if applicable. MSRI will provide a template for this section.

7. Mentoring Plan: Describe how the postdoctoral fellows will be mentored. Here is an example of a good mentoring plan:

> Each of our postdoctoral members will be assigned a mentor from among the senior participants. The mentors will be expected to meet weekly with their assigned postdocs to discuss research, encourage them to interact fully in the program and offer professional advice. A member of the organizing committee, XXXXXXX, has agreed to oversee the mentoring process to ensure that appropriate mentoring occurs. We also expect that there will be a weekly junior research seminar which will be run for and by the postdoctoral members and visiting graduate students.

8. Human Resources
The proposal must include a section describing in detail a plan to ensure the participation of women and underrepresented groups at the organizer and participant level, in both programs and workshops. This plan should include a list of potential participants among women and other underrepresented groups. A member of the organizing committee must be identified as the overseer of the plan. A member of the Human Resources Advisory Committee will be assigned to the program to work with the Human Resources designated organizer. The MSRI Human Resources Advisory Committee chairperson will receive a copy of approved proposals and may be invited to assist the organizing

committee with this task. The list of anticipated participants should have at least 60% U.S. based researchers. It should also be noted that for the last 15 years, 30% of Ph.D. recipients in mathematics have been women, with around 24% from Group I Institutions. Moreover, female faculty hires at Research I Universities have been on the rise. The latest statistics from AMS show that the percentage of female Ph.Ds. being hired by the Mathematics Departments at Research I Universities is at 24% (28% in public Research I Universities and 22% at Private Research I Universities). MSRI will provide a participant list spreadsheet to be completed by the organizers.

9. Planned Workshops: Every semester-long program will have three workshops: At the start of the program, there will be a Connections for Women (CFW) workshop, followed by an Introductory workshop. A topical workshop will be scheduled for sometime later during the semester. At the pre-proposal stage, the only requirement is to indicate the topic of the topical workshop, though you are welcome to provide additional information including the organizing committee for each workshop.

9a. Connections for Women Workshop
Description
Organizing committee and affiliation
Potential speakers and affiliation

Note: the CFW is a two-day workshop held immediately preceding the week of the *Introductory Workshop.* While different programs have approached these workshops in diverse ways, one of the principal objectives, strongly supported by the SAC and HRAC, is to provide an enhanced opportunity for female researchers to interact with other women with similar research interests. There is considerable flexibility for the organization of this two-day event, but MSRI does require good coordination between the *Connections* and *Introductory* workshop organizers so that as many female researchers as possible are supported to stay on for the *Introductory Workshop. It is* therefore customary to have one person be simultaneously on the organizing committees for both of these workshops. As is the case for all MSRI workshops, registration to attend *Connections* workshop lectures is **open to all interested researchers regardless of gender**.

9b. Introductory Workshop
Description
Organizing committee and affiliation
Potential speakers and affiliation

Note that the introductory workshops are meant to set the stage and provide the context for the program, with the intended audience being researchers **not** in the program. This would include members in the other programs, members of the local mathematical community, and participants from outside the area selected especially for the workshop, particularly from groups underrepresented in research intensive contexts: women, minorities, mathematicians not located at research centers, and graduate students. In selecting participants, priority is given to these latter groups. When done well, these introductory workshops have been effective in broadcasting the goals, ideas and techniques of a particular program to the mathematical public at large, as well as in bringing the MSRI community together as a whole. **The proposal must address how the organizers will ensure that the introductory workshop will be truly introductory.**

9c. Topical Workshop
Title
Description
Organizing committee and affiliation
Potential speakers and affiliation

10. Math Subject Classification numbers: (Check: http://www.ams.org/msc/msc2010.html). We distinguish between primary and secondary classification. Please be as thorough as possible, as this will allow the videos of the speakers to be searchable to a wider audience.

11. Key words: Provide key words for the program. Again, the more thorough you can be, the more likely we are to reach the widest audience.

12. Image: a high-resolution, non-copywrited image pertinent to the subject of the program. Please also provide a caption for the image.

13. One Page Overview
A one page summary describing the program and its place in mathematics in general terms is required for posting on our website and distribution to sponsors. If possible it should have some simple graphic. It should be informative and attractive to an audience at the level of beginning graduate students. Successful examples of this genre are available for consultation.