

Budget Justification

Senior Personnel:

The PI will devote 100% effort for 2 Summer Months per year in years 1, 2 and 3 on the research projects proposed. This proposed level of commitment is appropriate to the scope of work and in order to fulfill the research objectives.

The PI is aware of the NSF policy limiting NSF support for senior personnel to two months in any year. For the purpose of this restriction, Brown University defines a year as a 12-month period spanning from July 1 to June 30.

Other Personnel:

2 Undergraduate Student Research Assistants per year (summer)

1 Undergraduate Student (academic year) to work on website development (approximately \$1600 per year). The PI will hire a student to create and maintain a website that will be dedicated to fostering an inclusive research network for underrepresented groups and members of the LGBTQ community in mathematics.

Fringe Benefits:

PI (faculty summer) @ 29.5%

Undergraduate Student (summer) @7.5%

Travel:

Domestic:

The PI requests \$4,000 per year for domestic travel. These funds are requested for the PI to attend research-related conferences, seminars, or workshops that may arise during the course of the grant research. She also plans to take 2 to 3 trips per year to meet with her collaborators at the U. of Minnesota (C. Berkesch and M. Sayrafi), U. of San Diego (A. Booher), UC Berkeley (L. Cranton Heller, D. Eisenbud), U. of Wisconsin (D. Erman), Texas A&M (P. Klein), Washington U., St. Louis (W. Li), Cornell (R. Ramkumar) and San Francisco State (D. Ross).

Foreign:

The PI requests \$5,000 per year for foreign travel. Funds are requested for the PI to attend international research-related conferences, seminars, and workshops that may arise during the course of the grant research. She also plans to take 2 trips per year to Europe to meet with collaborators at Technische Universität, Berlin (D. Corey), Edinburgh U. (M. Hering), and U. of

Warwick (D. Maclagan). In addition to these collaborators, she might also visit J. Levinson (Simon Fraser University, Canada) and B. Sturmfels (Max Planck Institute for Mathematics in the Sciences, Leipzig, Germany).

Travel for Collaborators:

The PI requests \$2,000 per year to invite her colleagues (such as mentioned in the domestic and foreign travel justification) to Brown to conduct joint mathematical research related to this grant. These colleagues and collaborators may also present their relevant work at seminars held in the Mathematics Department. The PI will pay a portion of their travel expenses.

Other Direct Costs:

Computing:

User fees to the Computation and Visualization at Brown University (CCV) for VM hosting of high speed multi-parallel computations. User fees are estimated at \$400 per quarter annually.

Desktop Computer: The PI will purchase a desktop computer and peripherals in year one of the grant. The computer will be used to run dedicated computations on the work proposed.

Indirect Costs:

59.5% MTDC (years 1, 2 and 3)