# Models for Engaging Undergraduate Students in Research

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Joint Meetings of the AMS/MAA: Boston 2012

AMS Committee on Education

#### Part I: Before the Research Begins

#### **Topics:**

- Goals for students.
- Funding proposals.
- Choosing students / advisors.
- Finding a good research project.

# **Speakers:**

Dean M. Evasius, Joe Gallian, Jake Levinson Gina-Maria Pomann, Ivelisse Rubio

#### Part II: During the Research

# **Topics:**

- Student schedule / Professor schedule.
- Group Dynamics.
- Timeline for completing work.
- Useful classes / computer skills.

# **Speakers:**

Joe Gallian, Jake Levinson, Steven J. Miller Gina-Maria Pomann, Ivelisse Rubio

#### Part III: After the Research

# **Topics:**

- Credit for students / professors.
- How time intensive.
- Conferences.
- Undergraduate research and professional development.
- Funding and evaluating programs.

# **Speakers:**

Dean M. Evasius, Joe Gallian, Steven J. Miller, Gina-Maria Pomann

#### (A subset of) useful links:

- Elements of a good NSF proposal: http://sites.williams.edu/Morgan/2011/12/19/elements-of-good-nsf-reu-proposal/
- NSF REU homepage: http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=5517&from=fund
- AMS List of REUs: http://www.ams.org/programs/students/undergrad/emp-reu
- SMALL (Williams REU) Homepage: http://math.williams.edu/small/
- Young Mathematicians Conference (Ohio State): http://www.ymc.osu.edu/
- AMS Undergraduate page: http://www.ams.org/programs/students/undergrad/undergrad
- AMS Undergraduate Conference page and reports: http://www.ams.org/programs/edu-support/undergrad-research/undergrad-research http://www.ams.org/programs/edu-support/undergrad-research/PURMproceedings.pdf http://www.ams.org/programs/edu-support/undergrad-research/REUproceedings.pdf
- MAA Conferences: http://www.maa.org/rumc/upcoming.html
- LaTeX templates (paper, talk) and Mathematica primer: http: //web.williams.edu/Mathematics/sjmiller/public\_html/math/handouts/latex.htm

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