

AN INTRODUCTION TO REUS

January 14, 2016

WHAT I'LL BE TALKING ABOUT

- What is an REU?

WHAT I'LL BE TALKING ABOUT

- What is an REU?
- What would you get out of it?

WHAT I'LL BE TALKING ABOUT

- What is an REU?
- What would you get out of it?
- How do you apply for one?

WHAT IS AN REU?

- R: RESEARCH

WHAT IS AN REU?

- R: RESEARCH
- E: EXPERIENCES

WHAT IS AN REU?

- R: RESEARCH
- E: EXPERIENCES
- for

WHAT IS AN REU?

- R: RESEARCH
- E: EXPERIENCES
- for
- U: UNDERGRADUATES

WHAT IS AN REU (SLIGHTLY MORE DETAILED)

- Full Time Summer Research Program (typically 8-10 weeks)

WHAT IS AN REU (SLIGHTLY MORE DETAILED)

- Full Time Summer Research Program (typically 8-10 weeks)
- Held at sites across the country

WHAT IS AN REU (SLIGHTLY MORE DETAILED)

- Full Time Summer Research Program (typically 8-10 weeks)
- Held at sites across the country
- Usually aimed at students finishing Junior/Sophomore years (not always; a few programs take people between undergrad/grad school)

WHAT IS AN REU (SLIGHTLY MORE DETAILED)

- Full Time Summer Research Program (typically 8-10 weeks)
- Held at sites across the country
- Usually aimed at students finishing Junior/Sophomore years (not always; a few programs take people between undergrad/grad school)
- Typically Work in a small group, mentored by faculty/grad students on a math research project

WHAT SORTS OF PROJECTS?

- Varies widely from site to site

WHAT SORTS OF PROJECTS?

- Varies widely from site to site
- All Areas of Math – Programs aimed at Pure, Applied, Computational, Math Ed...

WHAT SORTS OF PROJECTS?

- Varies widely from site to site
- All Areas of Math – Programs aimed at Pure, Applied, Computational, Math Ed...
- Scott Manifold (Summer 2013, UCLA): Resolution of GPS Satellites

WHAT SORTS OF PROJECTS?

- Varies widely from site to site
- All Areas of Math – Programs aimed at Pure, Applied, Computational, Math Ed...
- Scott Manifold (Summer 2013, UCLA): Resolution of GPS Satellites
- Anthony Yasuda (Summer 2012, Chico State): "Reactive Rimming Flow of Non-Newtonian Fluids"

WHAT SORTS OF PROJECTS?

- Varies widely from site to site
- All Areas of Math – Programs aimed at Pure, Applied, Computational, Math Ed...
- Scott Manifold (Summer 2013, UCLA): Resolution of GPS Satellites
- Anthony Yasuda (Summer 2012, Chico State): "Reactive Rimming Flow of Non-Newtonian Fluids"
- Cal State San Bernardino REU 2016: Geometry and Knot Theory

WHAT DO I GET OUT OF IT (SHORT TERM)?

- Spend summer working on fun problems.

WHAT DO I GET OUT OF IT (SHORT TERM)?

- Spend summer working on fun problems.
- Collaborate with other undergraduates with similar interests.

WHAT DO I GET OUT OF IT (SHORT TERM)?

- Spend summer working on fun problems.
- Collaborate with other undergraduates with similar interests.
- \$\$\$\$ (generally room, board, plus a stipend)

WHAT DO I GET OUT OF IT (LONG TERM)

- The experience of working full-time on a (hard!) problem.

WHAT DO I GET OUT OF IT (LONG TERM)

- The experience of working full-time on a (hard!) problem.
- Looks good on Grad School Applications

WHAT DO I GET OUT OF IT (LONG TERM)

- The experience of working full-time on a (hard!) problem.
- Looks good on Grad School Applications
- (Maybe?) A publication

HOW DO I FIND PROGRAMS?

- Steve Butler maintains a massive list at <https://sites.google.com/site/mathreuprograms/>

HOW DO I FIND PROGRAMS?

- Steve Butler maintains a massive list at <https://sites.google.com/site/mathreuprograms/>
- Additional links (including slides from today) at www.math.ucr.edu/~costello/Summer.htm

HOW DO I FIND PROGRAMS?

- Steve Butler maintains a massive list at <https://sites.google.com/site/mathreuprograms/>
- Additional links (including slides from today) at www.math.ucr.edu/~costello/Summer.htm
- Look at Dates of Programs – sometimes UCR's late finish is an issue.

HOW DO I FIND PROGRAMS?

- Steve Butler maintains a massive list at <https://sites.google.com/site/mathreuprograms/>
- Additional links (including slides from today) at www.math.ucr.edu/~costello/Summer.htm
- Look at Dates of Programs – sometimes UCR's late finish is an issue.
- Also look at background (what courses they require), and if the problems look interesting.

- Most Deadlines Late Feb-Early March. Some much sooner!

APPLICATION TIPS

- Most Deadlines Late Feb-Early March. Some much sooner!
- Apply to Many Programs (applications usually free!)

APPLICATION TIPS

- Most Deadlines Late Feb-Early March. Some much sooner!
- Apply to Many Programs (applications usually free!)
- If unsure about eligibility for a program, ask!

APPLICATION TIPS

- Most Deadlines Late Feb-Early March. Some much sooner!
- Apply to Many Programs (applications usually free!)
- If unsure about eligibility for a program, ask!
- Most Programs Require 1-3 faculty letters – ask early

APPLICATION TIPS

- Most Deadlines Late Feb-Early March. Some much sooner!
- Apply to Many Programs (applications usually free!)
- If unsure about eligibility for a program, ask!
- Most Programs Require 1-3 faculty letters – ask early
- Some Programs (particularly NSF funded ones) require citizenship.