

DEPARTMENT OF MATHEMATICS

VIGRE Funding Report

(due 30 days after semester of support)

Semester/Summer and Year:

Summer 2008

Name: Robert Jenkins

List the graduate courses you have taken this semester (including independent studies), your grades, and the instructors:

Course	Title	Grade	Instructor

List the title, date and location of any talks you have given, either here or elsewhere:

If you are working on your dissertation, include a one paragraph description of your research progress. If you have not yet begun dissertation research, describe your progress toward finding a dissertation topic and advisor and beginning that research.

Over the summer I began working on a first draft of my thesis. At the end of the spring semester I reached my major goals for my thesis project and so the summer was spent finalizing details and checking over calculations.

List publications, if any.

Check all activities you completed during the funded period:

Academics:

- Independent Study
- Oral Comprehensive Exam
- Commence Thesis Research
- Conference attendance
- Conference participation
- Complete PhD

Professional development and outreach:

- AP Calculus Visit
- High School Workshops
- Undergraduate Research Project
- Undergraduate Research Seminar
- Super TA
- Mentoring junior graduate students for the qualifying exams
- RTG (help organize)
- Research Seminar (help organize)

Other (please specify)

I attended the Clay Mathematics Institutes summer school on Evolution Equations

Attach a brief statment about your academic progress and professional development during the period of support.

Robert Jenkins
Report for VIGRE support 5/08-8/08
September 12, 2008

This summer I used my VIGRE support to begin the process of writing up my thesis work, checking details and filling in little gaps which we had left unresolved as the research progressed. I hope to have a readable draft of my thesis work complete early in the fall semester so that I can include it with job applications and send it to letter writers to strengthen my resume as I look for postdoctoral positions for the coming year.

In addition to spending the summer typing I took advantage of the VIGRE funding, including a modest VIGRE travel award, to go to the Clay Mathematics Institute's summer school on evolution equations in Zurich, Switzerland. The four week school was an excellent experience; in particular the course on existence of solutions and well-posedness for focusing NLS was particularly useful for me. The course expanded my knowledge of the NLS equation by taking a completely different approach to studying solutions than we have in my thesis work. I feel that by attending these lectures I have a better appreciation for the community of research that surrounds my thesis work and for how my results fit into that body of research.

Finally, just before the summer semester ended I traveled to Montreal, to attend two weeks of the special year at CRM in Montreal, Canada. The week long series of lectures first on Random Matrices and second on Random Tilings and Partitions. These are areas in which I hope to do research in the future and it was a great learning experience. In addition, I had the chance to meet with several of the speakers to discuss their and my own research. Making these connections can only help as I start looking for a job this fall semester. Without the financial assistance of VIGRE, I could not have afforded to travel to either the summer school or to CRM. These were excellent opportunities for me to integrate myself into the research world where I hope to work after completing my Ph.D.