

**Research Training Group:
Statistics in the 21st Century**

**Objects, Geometry
and Computing**

Images, matrices, functions, trajectories, trees, or graphs are examples of objects arising in modern data analysis. The importance of such novel data types in statistics, as well as the importance of geometry and computing in their analysis cannot be overstated. This RTG training grant is addressing these challenges by relevant training activities for:

- undergraduate students
- graduate students
- postdoctoral fellows

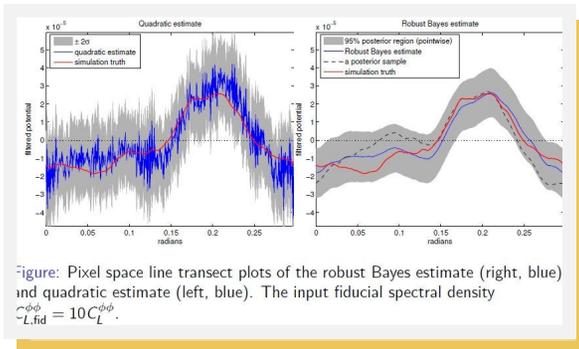


Figure: Pixel space line transect plots of the robust Bayes estimate (right, blue) and quadratic estimate (left, blue). The input fiducial spectral density $\sim \phi_\phi$
 $\sim L_{fid} = 10C_L^{\phi_\phi}$

Domestic female students and students from underrepresented minority groups are especially encouraged to apply.

*Interested students should contact Professor Wolfgang Polonik (wpolonik@ucdavis.edu) to discuss further details.
<http://anson.ucdavis.edu/nsf-rtg>*

**You May Also
Be Interested in Our
Integrated B.S./M.S.
Degree Program
in Statistics**

The Integrated B.S./M.S. Degree Program (IDP) is intended for UC Davis undergraduate students who seek to be employed as professional statisticians in government and industry.

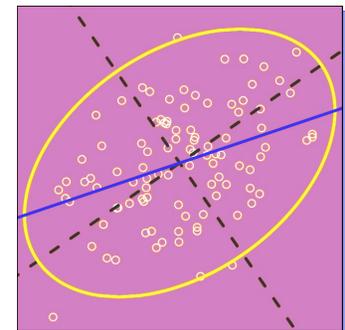
The IDP allows UC Davis undergraduates with strong academic records to enter and complete an M.S. degree in an accelerated time frame. In fact, this IDP in Statistics is designed to be completed in five years. It is available to qualified UC Davis undergraduate students in the B.S. programs in Statistics.

Undergraduate students at UC Davis must complete and submit the Statistics IDP form along with the supporting documents during the last quarter of their junior year.

*For complete details, please see:
<http://anson.ucdavis.edu/undergrad/bs-ms>*

**Undergraduate
NSF-Funded
Research Training Group
Statistics
In The
21st Century**

**Objects
Geometry
and Computing**



Research Training Group: Statistics in the 21st Century

Undergraduate Training Program

Each RTG-student will be assigned to a team that is working on a real scientific project. Work will begin early in the winter quarter and is expected to run through the spring quarter. Students will first be introduced to the project and tools needed to analyze the respective scientific data. The research is expected to be in full swing during the spring quarter.



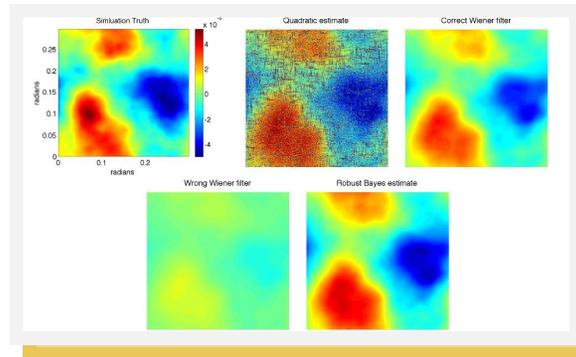
There will be various levels of training: team meetings, independent studies, and RTG group meetings. These group meetings will consist of tutorials and team presentations on projects and their findings.

Students can receive course credit through signing up for independent or group study courses.

Funding is available for one quarter during the academic year for up to 10 undergraduate students.

Some teams may have the opportunity to extend the project into summer research (additional funding is available for up to two summer months for three such projects).

RTG students will prepare written material on their findings. Some projects might result in poster presentations at some undergraduate research conference, or at the annual RTG symposium. Other projects will result in a written report or even a co-authored publication, should the research be on the adequate level.



Students with a solid background in statistics

interested in participating in the RTG activities should contact Professor Wolfgang Polonik (wpolonik@ucdavis.edu) for more details.

<http://anson.ucdavis.edu/nsf-rtg>

Research Training Group: Statistics in the 21st Century

A vital component of this training is for undergraduates to gain exposure to research in statistics by learning techniques for approaching scientific problems from a statistical point of view, and to experience more non-traditional statistical topics that often are not addressed in standard undergraduate classroom settings.

A more general goal of this training is that students develop more independence and confidence in applying statistical and computational methods, and that they gain experience on how to collaborate with scientists. That is expected to significantly enhance the students' professional and academic prospects.

Domestic female students and students from underrepresented minority groups are especially encouraged to apply.

Additional funding for undergraduate summer research projects is available for domestic students from underrepresented minorities.

