

The Faculty

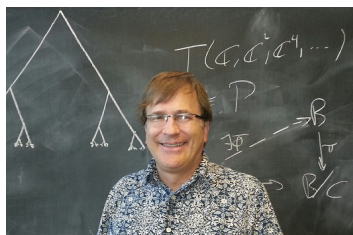
The research interests of the faculty within the department encompass core areas in:

Algebra/Number theory
Analysis
Dynamical Systems
Geometry
Math Education
Mathematical Biology
Mathematical Physics
Partial Differential Equations
Scientific Computing
Statistics

The faculty of the Department of Mathematics and Statistics receives funding from a variety of agencies and organizations. Currently the faculty is working on grants funded by the National Science Foundation, the Department of Energy, the National

Aeronautics and Space Administration, Sandia National Labs, the

Defense Threat Reduction Agency, and the Bill & Melinda Gates Foundation. Such a broad range of agencies requires an equally broad range of talents and interests.



Prof. Terry Loring
(math)

Research Areas:
Analysis, Mathematical Physics, Scientific Computing

The University of New Mexico
Department of Mathematics & Statistics
MSC01 1115
1 University of New Mexico
Albuquerque, NM 87131-0001



Department of Mathematics & Statistics

GRADUATE PROGRAM



<http://math.unm.edu>



UNM Outstanding Instructor Award to Prof. M. Cristina Pereyra (Math) and PhD Candidate Fares Qeadan (Stat)

Program of Study

The Department of Mathematics and Statistics offers programs that lead to a M.S. or Ph.D. degree with options in Pure Mathematics, Applied Mathematics, and Applied Statistics. Students planning graduate studies at the University of New Mexico will find a congenial de-

partment and a faculty of international stature.

Apply online at <http://admissions.unm.edu>

The Dept. requires:

- 3 letters of recommendation (2 must be from PhD's)
- Letter of Intent (note in your letter if interested in an assistantship)
- The Department recommends the Specialized Math GRE, but GRE scores are not required at the present time.

MS Mathematics

Pure mathematics & Applied mathematics

The student planning to study pure mathematics is expected to have taken the courses usually included in an undergraduate mathematics major, that is, linear algebra, abstract algebra and advanced calculus. To pursue the program in applied mathematics the student should have taken advanced calculus, linear algebra and have some familiarity with differential equations and scientific computing. Faculty may choose to admit promising students lacking an adequate undergraduate background to the graduate program, but such students are required to remove undergraduate deficiencies.

PhD Mathematics

The goal of the Ph.D. program is for the student to write a dissertation that makes a contribution to mathematics. To do this, the student must become familiar with the breadth of current research topics. The student taking advanced courses, participating in research seminars, attending colloquia, and talking to the faculty does this. Attending colloquia is particularly important; the department provides colloquia on many current research topics given by active researchers from around the world. Students should read the descriptions of the faculty interests; when topics of interest are found, the student should ask the faculty member for reading material on that topic.



Prof. Pierre Cartier
IHES, France

2012 Guest Colloquia Speaker

MS Statistics

Applied statistics

The Master of Science degree student should have taken introductory statistics, linear algebra and a calculus sequence including multivariable calculus. Promising students lacking an adequate undergraduate background may be admitted to the graduate program but are required to remove undergraduate deficiencies.

PhD Statistics

The Ph.D. program in statistics is quite flexible. The degree can vary from one that builds the skills necessary to modify existing methodologies and develop new methods for applied problems, to one that builds a deep knowledge of the mathematics behind current research in statistics. Dissertation focus will be toward an area such as biological applications, discrete data, financial modeling, image analysis, linear models, nonparametric statistics, pattern recognition, quality assurance, stochastic networks, or other choices.



Prof. Gabriel Huerta (Stat)

Research Areas: Scientific Computing & Statistics