



**Fall 2018**

**Directed Reading Program Symposium**

Monday, December 3 5:00-8:00pm

University of California, Santa Cruz

McHenry 4130

“Unique Factorization and the Class Number”  
**Matthew Holmes** (Mentor: Ed Karasiewicz)

“Encryption with an Elliptic Curve Computer Algorithm”  
**Nick Rezaee** (Mentor: Phil Barron)

“Dynamical Systems and Lyapunov Exponents”  
**Bryan Garcia** (Mentor: Kenneth Caluya)

Break for Dinner

“Lie groups and a double cover of  $SO(3)$ ”  
**Sandra Nair** (Mentor: Elijah Fender)

“Quaternions with an Application to the Spin of a Particle”  
**Cynthia Villalobos** (Mentor: Nathan Marianovsky)

“The Isoperimetric Inequality”  
**Saurabh Karmarkhar** (Mentor: Steven Flynn)

“Fukaya Categories”  
**Jae Hee Lee** (Stanford University)

Thanks all of the graduate student mentors for their work with undergraduates this quarter!