



# SEMINAR

## SCHOOL OF MATHEMATICS AND STATISTICS

DATE: 5 MARCH 2019

### TITLE

On Euclidean Ideal classes

### VENUE | TIME

Seminar Room I  
04:30 –05:30 PM

### SPEAKER

Prof. Sanoli Gun,  
Institute of Mathematical Sciences,  
Chennai

### ABSTRACT

Weinberger, in an attempt to answer a question of Samuel, showed that class group of a number field with infinitely many unit is Euclidean if and only if it is a PID provided generalized Riemann hypothesis is true. Lenstra generalized this results to show that class group of a number field with infinitely many units is cyclic if and only it has an Euclidean ideal class provided extended Riemann hypothesis is true. In this talk, we will describe the history of this problem and present some new unconditional results. This a report on joint works with Jyothsnaa S. and J.M. Deshouillers.