

THE FIELDS INSTITUTE FOR RESEARCH IN MATHEMATICAL SCIENCES

## POSTDOCTORAL/GRADUATE STUDENT SEMINAR SERIES ON L-FUNCTIONS

### **SPEAKER:**

# XIANGYONG WANG University of Alberta and The Fields Institute

On the Topic:

#### **A Class of Integral Representations**

Let G be a finite group and A the ring of integers in a number field. An AG-lattice is called a permutation lattice if it has a finite A-basis, which is permuted by the action of G. It will be called a permutation summand, if it is a direct summand, as AG-module, of a permutation lattice. In the case A=Z permutation summands occur in the study of torsion units in integral group rings, and of rationality questions on the function fields of algebraic tori. We are interested in classifying permutation summands by constructing certain numerical invariants. Such invariants are globalization of Benson and Parker's 'species' on trivial source modules over logical rings Ap. We will show some obtained results and raise a question of finding a Burnside type congruence on our invariants in this talk.

#### Wednesday, October 27, 1993

3:30 pm, Room 3018

#### at

#### The Fields Institute

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