

Announcement

Professor
Donald S. Passman
University of Wisconsin - Madison, USA

Visiting Atlantic Algebra Centre
March 27 - April 3, 2010

As advertised earlier, Professor Passman will deliver a mini course under the title

The Semiprimitivity Problem for Group Rings

There will be three lectures

Monday, March 29. Time: 12 - 1 pm, Room: HH-3017

Tuesday, March 30. Time: 12 - 1 pm, Room: A-3020

Wednesday, March 31. Time: 12 - 1 pm, Room: HH-3017

On Thursday, April 1, 2010, Professor Passman will deliver a Distinguished Colloquium Talk under the title

Maximal Filtrations of Semisimple Rings and Lie Algebras

Time: 1 - 2 pm, Room: A-1046

Abstract

Let A be a semisimple ring or a finite-dimensional semisimple Lie algebra and use \circ to denote its multiplication. A \mathbb{Z} -filtration \mathcal{F} of A is a family $\{F_i \mid i \in \mathbb{Z}\}$ of additive subgroups of A such that $F_i \subseteq F_{i+1}$ and $F_i \circ F_j \subseteq F_{i+j}$ for all i, j . Furthermore, \mathcal{F} is said to be bounded if there exist subscripts $r, s \in \mathbb{Z}$ with $F_r = 0$ and $F_s = A$. It is certainly an impossible task to classify all such filtrations of A . However, there is an obvious inclusion $\mathcal{F} \subseteq \mathcal{G}$ between filtrations, and it is possible to classify the maximal bounded \mathbb{Z} -filtrations of A . In this talk, I will discuss my joint work with Yiftach Barnea on this problem.