THE FIELDS INSTITUTE

FOR RESEARCH IN MATHEMATICAL SCIENCES

ABSTRACTS 1.2

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Koszul Modules and Modules with Linear Presentations (25-30 min)

Algebras for which every module is a Koszul module are classified. A necessary condition for the subcategory of graded modules with linear presentations to be equal to the subcategory of Koszul modules is given. This condition is also a sufficient condition when the algebra is radical cube zero. Finally, these subcategories are studied when the algebra is a one point extension. Joint work with E. Green, (Virginia Tech), Pu Zhang (University of Science an Technology of China).