

# CMI Mathematics Colloquium

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## Linearity of resolution of powers of facet ideals of simplicial trees

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In the first half, I will cover the resolution of graded modules, the linearity of the resolution, and ideals with linear quotients. Also, I will talk about linearity in terms of the combinatorial properties of simplicial complexes in the context of square-free monomial ideals. In the second half, I will describe the linearity of the resolution of powers of facet ideals of simplicial trees.