

COLLOQUIUM DE L'IMJ-PRG

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Diamond Lemma from its inception

to the present days



I shall talk about the beautiful result that underpins many different topics in mathematics and theoretical computerscience, known to many people as the Diamond Lemma. I shall briefly discuss its origins, and then focus on its ubiquity in algebra, giving an extensive historical overview of the algebraic Diamond Lemma, some of its applications, and an outline of new proof (joint with P.Tamaroff) using multiplicative free resolutions of monomial algebras.

