

SEMINARIO

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Regularity of deficiency modules through spectral sequences

Abstract: The goal of this talk is to obtain upper bounds for the regularity of graded deficiency modules in the spirit of the one obtained by Kummini-Murai in the monomial case building upon the spectral sequence formalism developed by Álvarez Montaner, Boix and Zarzuela. This spectral sequence formalism allows us not only to recover Kummini-Murai's upper bound for monomial ideals, but also to extend it for other types of rings, which include toric face rings and some binomial edge rings, producing to the best of our knowledge new upper bounds for the regularity of graded deficiency modules of this type of rings.

The content of this talk is based on joint work with Santiago Zarzuela (Universitat de Barcelona).

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