

- YHON CASTRO, *Almost disjoint families and their cardinal invariants*.
Centro de Ciencias Matemáticas, UNAM, Antigua Carretera a Pátzcuaro # 8701 Col.
Ex Hacienda San José de la Huerta Morelia, Michoacán, México.
E-mail: yhon@matmor.unam.mx.

Almost disjoint families are combinatorial objects that have proven to be relevant in set theory and other areas of mathematics, such as general topology, functional analysis, and forcing theory. In this talk, we focus on the cardinal invariants of the Boolean algebra $\mathcal{P}(\omega)/\mathcal{I}_{\mathcal{A}}$, where $\mathcal{I}_{\mathcal{A}}$ denotes the ideal generated by a maximal almost disjoint (MAD) family \mathcal{A} . We present various ZFC results involving classical cardinal invariants and establish some consistency results. In particular, we sketch a proof of the consistency $\mathfrak{h}_{\mathcal{A}} < \mathfrak{h}$ for some MAD family \mathcal{A} . This is part of an ongoing joint work with Jörg Brendle, Michael Hrušák, and Diego A. Mejía [1].

[1] JÖRG BRENDLE, YHON CASTRO, MICHAEL HRUŠÁK and DIEGO A. MEJÍA, *Cardinal invariants related to MAD families*, ***In preparation***