

# **A criterion for density of Hodge loci (Joint with David Urbanik)**

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I will explain how to obtain a necessary and sufficient criterion for the Hodge locus of an integral polarized variation of Hodge structures to be dense in the base of the variation for the analytic topology and present results obtained jointly with David Urbanik in this direction. Our method gives a necessary and sufficient condition for density under the Zilber-Pink conjecture, and I will present the precise finiteness input needed to prove unconditionally the sought for criterion.