

Updated version

Special lecture by Jean-Pierre Demailly

On Thursday at 18:00 there will be a special lecture:

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On the Green-Griffiths-Lang and Kobayashi conjectures for the hyperbolicity of algebraic varieties

The Green-Griffiths-Lang conjecture stipulates that for every projective variety X of general type over \mathbb{C} , there exists a proper algebraic subvariety of X containing all non constant entire curves $f: \mathbb{C} \rightarrow X$. Using the formalism of directed varieties, we prove that this assertion holds true in case X satisfies a strong general type condition that is related to a certain jet-semistability property of the tangent bundle T_X . We then Explain how this result can be used to investigate the long-standing of Kobayashi (1970), according to which a very general algebraic hypersurface of dimension n and degree at least $2n + 1$ in the complex projective space \mathbb{P}^{n+1} is hyperbolic.