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Im Rahmen der

AG Komplexe Analysis

laden wir zu folgendem Vortrag ein:

**Local polynomial convexity of certain classes of surfaces with
degenerated CR-singularity.**

**(Dr. Sushil Gorai, Indian Institute of Science Education and
Research, Kolkata)**

am **Dienstag, den 21.06.2016, um 16 Uhr c.t. in Raum G.15.25.**

Abstract: Pascal Thomas introduced a class of cubic homogeneous cubic polynomial in z and \bar{z} , namely $p(z, \bar{z}) = z^2\bar{z} + \epsilon z\bar{z}^2 + \frac{\epsilon^2}{3}\bar{z}^3$, $\epsilon \in \mathbb{C}$, while giving examples of three totally-real planes in \mathbb{C}^2 whose pairwise union is locally polynomially convex at the origin but polynomial hull of the union contains interior. The above class of graphs has a degenerated CR-singularity at the origin. We argue that the local polynomial convexity of the above class of graphs at the origin is completely determined by the parameter ϵ . In most cases we use a proper holomorphic map from \mathbb{C}^2 to \mathbb{C}^2 to pull back a graph of our considerations to union of three transverse totally-real planes. In the final part we will discuss local polynomial convexity of the surfaces viewing locally as graphs whose leading homogenous term is of the above form.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina