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Fachbereich C, Mathematik  
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Im Rahmen der

## AG Komplexe Analysis

laden wir zu folgendem Vortrag ein:

**Holomorphic vector fields**

**tangent to a real hypersurface germ of infinite type**  
**(Prof. Kang-Tae Kim, POSTECH, Pohang, Korea)**

am **Montag, den 14.01.2013, um 16 Uhr c.t. in Raum D.13.15.**

**Abstract:** A holomorphic tangent vector field in  $\mathbb{C}^n$  is said to be tangent to a real hypersurface if its real part is tangent. Such vector fields naturally arise from a continuous family of holomorphic automorphism group of a smooth domain (when they extend smoothly to the boundary). So their study is closely related to the study of automorphism group. In relation to the conjecture of Greene and Krantz on automorphism group orbits of a bounded domain with smooth boundary, it is expected that the holomorphic vector fields tangent to the real hypersurface germ with infinite contact type (in the sense of D'Angelo) should be very rare—nonexistent, to be bolder. I will present the study of the case when the real hypersurface germ is in two-dimensional complex Euclidean space. This is from a collaboration with Ninh Van Thu of GAIA, POSTECH.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina