

BERGISCHE UNIVERSITÄT  
WUPPERTAL  
Gaußstraße 20  
42119 Wuppertal



Fakultät 4, Mathematik  
und Naturwissenschaften

Prof. Dr. Nikolay Shcherbina

Telefon: (0202) 439-3041

Raum: G.15.19

Im Rahmen der

## AG Komplexe Analysis

laden wir zu folgendem Vortrag ein:

### About the adjunction formula for singular complex spaces (Martin Sera, Göteborg)

am Dienstag, den 26.02.2019, um 14 Uhr c.t. in Raum G.15.25.

**Abstract:** Crucial information about the geometry of a complex manifold is described by its canonical line bundle. As a central tool, we can use the adjunction formula to compute the canonical bundles of submanifolds. On complex spaces, the concept of canonical bundle generalizes to at least two different notions – Grothendieck’s dualizing sheaf  $\omega_X$  and the Grauert-Riemenschneider canonical sheaf  $\mathcal{K}_X$ . While there is an adjunction formula for  $\omega_X$ , the computations of  $\mathcal{K}_X$  are more evolved. For a singular hypersurfaces  $X$  in a manifold, J. Ruppenthal, H. Samuelsson Kalm & E. Wulcan present an adjunction formula for  $\mathcal{K}_X$  and give a formula determining the correlation between  $\omega_X$  and  $\mathcal{K}_X$ . We would like to discuss generalizations of these results to subspaces of higher codimension. This reports on an ongoing project in collaboration with J. Ruppenthal & H. Samuelsson Kalm.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina