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Im Rahmen der

## AG Komplexe Analysis

laden wir zu folgendem Vortrag ein:

### Isolated hypersurface singularities and associated forms (Prof. Alexander Isaev, Australian National University)

am Montag, den 16.07.2018, um 16 Uhr c.t. in G.15.25.

**Abstract:** Let  $d \geq 3$ ,  $n \geq 2$ . The object of our study is the morphism  $\Phi$ , introduced by J. Alper, M. Eastwood and the speaker, that assigns to every homogeneous form of degree  $d$  on a complex  $n$ -dimensional space for which the discriminant  $\Delta$  does not vanish a form of degree  $n(d-2)$  on the dual space, called the associated form. This morphism is  $SL_n$ -equivariant and is of interest in connection with the well-known Mather-Yau theorem, specifically, with the problem of explicit reconstruction of an isolated hypersurface singularity from its Tjurina algebra. In this talk I will survey known results on the morphism  $\Phi$  and state several open problems. Our goal is to draw the attention of complex analysts and geometers to the concept of the associated form and the intriguing connection between complex singularity theory and invariant theory revealed through it.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina