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*Fachbereich C, Mathematik  
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Im Rahmen der

## AG Komplexe Analysis

laden wir zu folgendem Vortrag ein:

### Residue currents and fundamental cycles

(Elizabeth Wolcan, Chalmers University of Technology,  
Göteborg)

am **Dienstag, den 08.04.2014, um 16 Uhr c.t. in Raum G.15.25.**

**Abstract:** I will discuss a joint work (in progress) with Richard Lärkäng. Given holomorphic functions  $f_1, \dots, f_m$  whose common zero set  $\{f = 0\}$  has codimension  $m$ , there is a factorization of the current of integration  $[f = 0]$  along  $\{f = 0\}$ , counted with multiplicities, as

$$[f = 0] = \frac{1}{(2\pi i)^m} \bar{\partial} \left[ \frac{1}{f_1} \right] \wedge \dots \wedge \bar{\partial} \left[ \frac{1}{f_m} \right] \wedge df_m \wedge \dots \wedge df_1.$$

Here  $\bar{\partial}[1/f_1] \wedge \dots \wedge \bar{\partial}[1/f_m]$  is the Coleff-Herrera residue current of  $f_1, \dots, f_m$ . I will present a generalization of this factorization to a more general setting, which is closely related to a result by Monique Lejeune-Jalabert from the 80's.

Alle Interessenten sind herzlich eingeladen!

gez. Prof. N. Shcherbina