

Elektrotechnik-Elektronik-Informationstechnik

# EEI KOLLOQUIUM

## THE DIGITAL ALLPASS FILTER: A VERSATILE SIGNAL PROCESSING BUILDING BLOCK

**Professor Sanjit K. Mitra**

University of California, Santa Barbara, California and  
University of Southern California, Los Angeles, California

**Donnerstag, der 18.07.2013, 14<sup>00</sup> Uhr (Sondertermin)**

Cauerstraße 7, Raum N5.17

**Diskussionsleitung: Prof. Dr.-Ing. A. Kaup**

The digital allpass filter is a computationally efficient signal processing building block which is quite useful in many signal processing applications. In this talk we review the properties of digital allpass filters, and provide a broad overview of the diversity of applications in digital filtering such as notch filtering, low sensitivity digital filter implementation, tunable filter design, complementary filtering and filter banks, multirate filtering, digital audio, image zooming, etc.