

EEI-KOLLOQUIUM

Tunable RF SAW/BAW Filters: Dream or Reality?

Ken-ya Hashimoto

Chiba University, Japan

Freitag, der 03.09.2010, 10⁰⁰ Uhr (Sondertermin)

Cauerstraße 9, Seminarraum 4.14

Diskussionsleitung: Prof. Dr.-Ing. R. Weigel

This talk discusses whether pragmatic tunable RF SAW/BAW filters are realizable or not. Demanded key technologies are of (a) interconnection of SAW/BAW resonators with multiple varicaps and controlling circuitry, (b) extremely wideband SAW/BAW resonators, and (c) high Q varicaps with wide tuning range. Recent advancement of related technologies is going to resolve these hard obstacles. In collaboration with a few leading-edge research labs, the author's group just started a project to develop tunable RF SAW/BAW filters applicable to present and/or future communication systems. Current status, research plan and future prospects of this project will be detailed.