Invitasjon

Norsk MTT/AP chapter har gleden av å invitere deg til å delta på et heldags-seminar fredag den 18. september hos Norges Teknisk-naturvitenskapelige Universitet, NTNU, i Trondheim.

Engineering and Measuring RF Waveforms; the Unifying Link between System Performance, Circuit Design and Transistor Technology

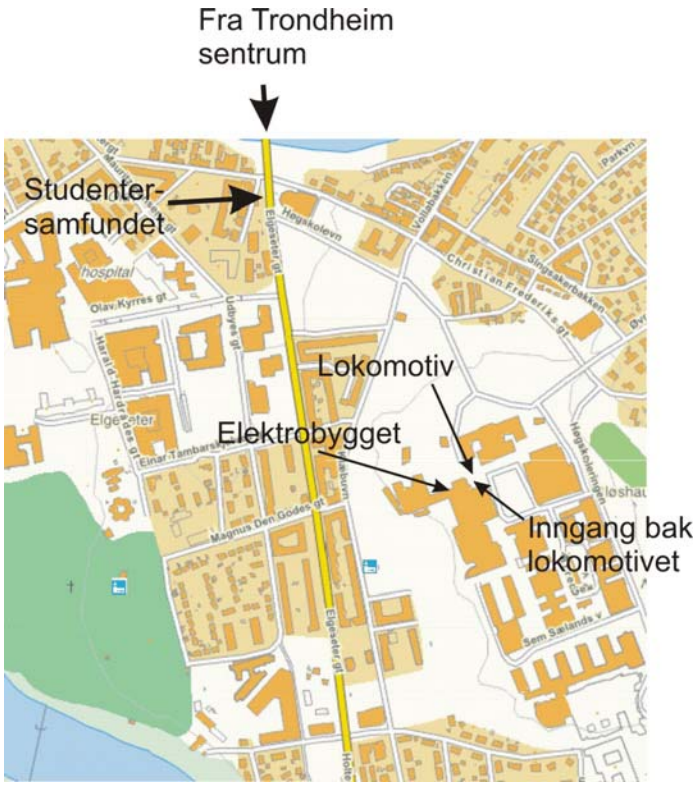
Paul Tasker
Cardiff School of Engineering, Wales, UK

18. September 2009

09:30 - 10:05	Coffee and Introductions
10:15 - 11:45	CW Measurement System Realization and Calibration
11:45 - 12:00	Application in Transistor Characterization and Modeling
12:00 - 13:00	Lunch
13:00 - 14:15	Application in High Efficiency RF Power Amplifier Design
14:15 - 14:45	Coffee break / discussion
14:45 - 16:00	Next Generation Multi-tone Systems
16:00 - 17:30	Social time with pizza and beer if sufficient interest

This talk discusses how appropriately engineered RF waveforms can help meet telecommunication system goals such as power, efficiency, and linearity. It is well known that the performance of transistors in power amplifiers is linked to their mode of operation (Class A, A/B, C, etc.). A number of measurement systems now allow for the direct measurement of RF waveforms, either at RF or in the envelope domain. Coupling such systems with impedance control hardware enables experimental control (engineering) of these terminal RF waveforms. Because these measurement systems operate in the time domain they allow for a more natural integration of measurement and CAD simulation based design approaches.

This talk touches on several topics of interest to microwave engineers including modelling and measurement of power amplifier transistors and circuits; design and predistortion correction of nonlinear telecommunication systems; and circuit design methods that incorporate new transistor technology. Examples will demonstrate measurement feedback to support and link both the design of high power amplifier transistor technology (GaAs HBT/HFET, GaN HFET, Si LDMOS) and the circuit environment (harmonic load-pull, linearisation via base-band injection).



Møtested: NTNU Gløshaugen, Elektrobygget, 7030 Trondheim
Taxi fra Værnes lufthavn til "NTNU Gløshaugen, Lokomotivet ved Elektrobygget", eller flybuss til Trondheim, Studentersamfundet.

Vi ber dere om å melde dere på innen 1. sept ved å sende mail til Jukka Typpö jukka.typpo@iet.ntnu.no. Si fra om du vil være med på den sosiale timen etterpå.

Gratis inngang for IEEE MTT medlemmer, ikke-medlemmer kr 500,-.

Vennlig hilsen
2009 styret

Chair:	Eric Wheatley	Nera Networks, Bergen ew@ieee.org, 55 22 52 95
Vice chair	Jukka Typpö	NTNU, Institutt for elektronikk og telekommunikasjon jukka.typpo@ieee.org, 73591413
Sec./Treas.:	Yngve Thodesen	Nera Networks, Bergen ythod@ieee.org, 55 22 55 02