

Uitnodiging • Invitation • Taletšo

UP-Ekspertlesingreeks • UP Expert Lecture Series • Molokoloko wa Dithutophahlošo ka Ditsebi tša UP



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

21 Augustus 2013 • 21 August 2013 • 21 Phato 2013

The Vice-Chancellor and Principal of the University of Pretoria

Prof Cheryl de la Rey

cordially invites you to attend the twelfth lecture in the

UP EXPERT LECTURE SERIES

‘THE BROADBAND DIVIDE: WHERE IS THE DIGITAL HIGHWAY GOING?’

presented by Prof Sunil Maharaj

In 1980 there were around 5 000 analogue mobile subscribers. With the GSM digital mobile coming into play around 1988, it is predicted that by the end of 2013 there will be approximately 7 billion connections in the world. With such spectacular growth in the wireless communications industry, the next challenge is the provision of greater throughput via broadband connections that are both pervasive and affordable. Today, broadband wireless is largely based on orthogonal frequency division multiplexing (OFDM) technology.

Current challenges in this area can be summarised as follows:

1. Increased power consumption motivates the need for ‘green radios’.
2. The opportunity for spectrum sensing and cognitive radio.
3. The digital divide and the radio frequency spectrum regulatory landscape.
4. Innovation in software applications and localisation.

Prof Sunil Maharaj holds a MEng in Electronic Engineering, an MSc in Operational Telecommunications and a PhD in Electronic Engineering with specialisation in wireless communications. He is a Professional Engineer (Pr Eng) and a Fellow of the South African Academy of Engineering (SAAE). Prof Maharaj is the current Head of Department and the SENTECH Chair in Broadband Wireless Multimedia Communications (BWMC) in the Department of Electrical, Electronic and Computer Engineering in the Faculty of Engineering, Built Environment and Information Technology at the University of Pretoria.

The UP Expert Lecture Series provides a public platform for researchers of the University of Pretoria to engage with a general audience on significant developments in their fields of expertise that are likely to have an impact in the future.

We invite you to participate in UP’s one hour EXPERT LECTURE SERIES and be enriched by the University’s research output.

Date:	Wednesday 21 August 2013
Lecture will start at:	17:00
Cocktail after the lecture:	18:15–19:30
Venue:	Senate Hall, Hatfield Campus, Pretoria
GPS coordinates:	S25° 45’ 21” E28° 13’ 51”
Dress:	Day wear
RSVP:	Click on the link: web.up.ac.za/uprsvp5 by 14 August
Enquiries:	Lynette Smith, 012 420 2278