CWTe Research Retreat 2018

Opening and Introduction

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Welcome to the 9th CWTe Research Retreat
CWTe Research Programs

- Ultra-high data rates
  - High Frequencies (>= 30GHz)
  - Very high data rates (>1Tbps)
  - Beamforming with many elements @ low cost
  - Next generation RAN (RoF, M-MIMO, Dyn. Reconf.)

- Ultra-low power and IoT
  - Small (<< 1mm3), low-cost
  - Battery-less sensors/controls
  - Self-configuring networks, autonomous devices and AI

- THz Systems
  - 3D spectroscopic imaging
  - Small, low-cost short range

- Radio Astronomy
  - Next generation radio telescopes
  - Large antenna arrays
  - Low frequency (<30 MHz)
CWTe Labs
Highlights and Announcements

Ultra-high data rates
- EU ICT-18 project 5G Mobix (5G in cross-border corridors) granted
- EU Marie Curie SILIKA (5G Ka-band Massive MIMO )-Successful mid-term review
- NWO Take-off grant for feasibility study “FOCALPOINT” for future 5G wireless backhaul

Ultra-low power and IoT
- Deployment of GRAVELNET- distributed testing facilities for IoT HW and SW

THz systems
- Extension of the THz lab with ultra-fast spectroscopy and nanophotonic lab

Radio Astronomy
- 2 Postdocs, 3 Ph.D students and 0.2 FTE UD about to start
- Inaugural lecture Prof. Mark Bentum - November 2, 2018
Centre for Wireless Technology Eindhoven
CWTe Research Retreat 2018

Program
Invitation
CWTe 2018 Research Retreat

Wednesday, 10th of October 2018
De Zwarte Doos, 1st floor, TU Eindhoven

Hosted by: Centre for Wireless Technology Eindhoven

9.00 - Welcome with coffee
Morning program
9.30 Opening and introduction
9.40 Recent developments in WiFi
10.15 Seeing and thinking with the visual brain – even if the eyes don’t work
10.50 - Break (incl. posters)
11.20 Towards a smarter use of spectrum
11.55 Really dense Internet of Things
Lunch
12.30 - Lunch (incl. posters)
Afternoon program
13.30 Phased array feeds, a new lease of life for the Westerbork Radio Telescope
14.05 The evolving automotive radar landscape:
waveform, system solutions and technology partitioning
14.40 - Break (incl. posters)
15.10 Focused wireless power transfer
15.45 AESA radar developments at Thales Nederland BV
Closing
16.20 Closing session
16.30 - Drinks and networking

For registration: see link on www.tue.nl/cwte
Centre for Wireless Technology Eindhoven