2018 Symposium on Information Theory and Signal Processing in the Benelux

31 May, 1 June, 2018
University of Twente, Enschede, The Netherlands
Venue: Hotel De Broeierd-Enschede

PROGRAM
For details, see next pages

Thursday, 31 May

10.00-10.55  Registration
10.55-11.00  Opening
11.00-12.20  Oral Session 1
12.20-13.15  Lunch
13.15-14.00  Keynote 1
14.00-14.15  Break
14.15-15.35  Oral Session 2
15.35-15.45  Break
15.45-16.30  Poster Session 1
16.30-17.30  WIC General Assembly
17.45-21.00  Social Event + dinner

Friday, 1 June

9.00- 9.30  Coffee
9.30-10.30  Keynote 2
10.30-10.50  Break
10.50-12.10  Oral Session 3
12.10-13.00  Lunch
13.00-13.45  Poster Session 2
13.45-14.00  Break
14.00-15.20  Oral Session 4
15.20-15.40  Drinks
15.40-16.00  Awards & Closure
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Thursday 31 May, 2018

10.00-10.55  Registration
10.55-11.00  Opening
11.00-12.20  Oral Session 1

Long range IoT connections: experimental confirmation of the energy drain and exploration of escape routes
  Gilles Callebaut, Geoffrey Ottoy, Guus Leenders, Lieven De Strycker and Liesbet Van der Perre

Social diversity for reducing the impact of information cascades on social learning
  Fernando Rosas, Kwang-Cheng Chen and Deniz Gündüz

Zero Secrecy Leakage for Multiple Enrollments of Physical Unclonable Functions
  Lieneke Kusters, Onur Günlü and Frans M.J. Willems

Operational Rate-Constrained Noise Reduction for Generalized Binaural Hearing Aid Setups
  Jamal Amini, Richard C. Hendriks, Richarhd Heusdens, Meng Guo and Jesper Jensen

12.20-13.15  Lunch
13.15-14.00  Keynote 1

Deep Learning for Multimedia
  Marcel Worring, University of Amsterdam

14.15-15.35  Oral Session 2

Quantum Key Recycling with noise
  Daan Leermakers and Boris Škorić

Feasibility of Colonic Polyp classification with CNN based on Blue Light and Linked Color Imaging
  R. Fonollà, F. van der Sommen, R.M. Schreuder, E.J. Schoon and P. H.N de With

Effect of Splitter & Combiner Non-Idealities in mm-wave Hybrid MU-MIMO System
  Abhijeet Kanitkar, Steve Blandino, Claude Desset, André Bourdoux, Sofie Pollin

Distributed Edge-Variant Graph Filters
  Mario Coutino, Elvin Isufi and Geert Leus

15.35-15.45  Break
15.45-16.30 Poster Session 1

- Maximum Likelihood Decoding for Channels with Uniform Noise and Offset
  *Renfei Bu and Jos Weber*

- Calculation of the Mean Strain of Non-uniform Strain Fields Using Conventional FBG Sensors
  *Aydin Rajabzadeh, Richard C. Hendriks, Roger M. Groves and Richard Heusdens*

- Estimating Source-to-Electrode Transfer Functions in Atrial Electrograms
  *Bahareh Abdi, Richard C. Hendriks, Alle-Jan van der Veen and Natasja M.S. de Groot*

- Video Quality Assessment in Video Streaming Services: Encoder Performance Comparison
  *Rufat Alizada*

- The Behavior of Principal Component Analysis (PCA) and Linear Discriminant Analysis (LDA) for Face Recognition
  *Nova Hadi Lestriandoko, Luuk Spreeuwers and Raymond Veldhuis*

- Enabling Transmit Diversity in a Distributed Architecture for IEEE 802.11p
  *Lars van Meurs, Arie Koppelaar, Alessio Filippi and Marinus van Splunter*

- A Novel Low-Complexity Robust Distributed Beamformer
  *Andreas I. Koutrouvelis, Thomas W. Sherson, Richard Heusdens and Richard C. Hendriks*

- PUF-Enabled Asymmetric Cryptography

- Fingerprint template protection with spectral minutia-pair representations
  *Taras Stanko, Bin Chen and Boris Škorić*

- Secure comparison through simple bit operations
  *Thijs Veugen*

16.30-17.30 WIC General Assembly

17.45-21.00 Social Event + dinner

The bus for the social event + dinner leaves at 17.45 sharp from hotel The Broeierd, so if you want to join, please gather at the entrance of the hotel. We will return by bus around 21.00.
Friday 1 June, 2018

9.00- 9.30 Coffee/thee

9.30-10.30 Keynote 2

How Reliability, Latency, Massiveness, and Blockchain are Transforming IoT Communication
Petar Popovski, Aalborg University

10.30-10.50 Break

10.50-12.10 Oral Session 3

Improved BER Performance of Hard-decision Staircase Code via Geometric Shaping
Yi Lei, Bin Chen and Alex Alvarado

Particle Filter-based Parameter Estimation in a Model of the Human Circadian Rhythm
Jochem Bonarius and Jean-Paul Linnartz

A Blockchain-based Signature Scheme for Dynamic Coalitions
Ricky A. Sewsingh, Jan C.A. Van der Lubbe and Merel J. De Boer

Wireless Channel Modeling for Low-altitude UAV Networks in Urban Environments
Jianqiao Cheng, Ke Guan and François Quitin

12.10-13.00 Lunch

13.00-13.45 Poster Session 2

On the Effect of Polarization for Reliable Massive MIMO Communication
Sara Gunnarsson, Jose Flordelis, Liesbet Van der Perre and Fredrik Tufvesson

Gabor Expansion for Simultaneous Wireless Power and Information Transfer (SWIPT): Interference Analysis
Hussein Kassab and Jérôme Louveaux

Rate-Distributed Spatial Filtering Based Noise Reduction in Wireless Acoustic Sensor Networks
Jie Zhang, Richard Heusdens and Richard C. Hendriks

Measurement-based Assessment of Noise Sources in Office and Household Environments Impacting Ultrasound Indoor Positioning
Chesney Buyle, Bert Cox and Liesbet Van der Perre

Region of interest segmentation of VLE data using CNN and weighted groundtruth
Joost van der Putten, Fons van der Sommen, Maarten R. Struyvenberg, Jeroen de Groof, Wouter Curvers, Jaques J.J.G.H.M. Bergman and Peter H.N. de With

The coset leader weight enumerator of the product code $[m, m - 1, 2]_q \otimes [n, n - 1, 2]_q$
Putranto Utomo and Ruud Pellikaan
A Prototype of Finger-vein Phantom  
*P. Normakristagalu, L.J. Spreeuwers and R.N.J. Veldhuis*

On Constellation Shaping for Short Block Lengths  
*Y.C. Gültekin, W.J. van Houtum and F.M.J. Willems*

Round Robin Differential Phase Shift QKD security proof  
*Daan Leermakers and Boris Škorić*

13.45-15.20 Break

14.00-15.20 Oral Session 4

Distributed adaptive signal estimation in wireless sensor networks with noise in the exchanged signals  
*Fernando de la Hucha Arce, Marc Moonen, Marian Verhelst, Alexander Bertrand*

Breaking Out of the Black Box in Automated Image-Based Flower Recognition  
*Diah Harmony Apriyanti, Luuk Spreeuwers and Raymond Veldhuis*

Capacity of the First-Order Low-Pass Channel with Power Constraint  
*Shokoufeh Mardani and Jean-Paul Linnartz*

A Quantum Key Recycling Scheme based on qubits  
*Helena Bruyninckx*

15.20-15.40 Drinks

15.40-16.00 Awards & Closure