## Program

### Plenary 1

### Poster 1

| Title                                                                 | Authors                                                                 | Pages |
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| **A Tight Lower Bound on the Mutual Information of a Binary and an Arbitrary Finite Random Variable as a Function of the Variational Distance** | Arno Stefani (Institute for Information Transmission, Friedrich-Alexander University Erlangen-Nürnberg, Germany); Johannes Huber (University of Erlangen-Nuremberg, Germany); Christophe Jardin (Bioinformatics, Germany); Heinrich Sticht (Bioinformatics, Germany) | 1-4   |
| **A Network Coding Algorithm for Video on Demand Multicast using a Single Server Channel** | Amy Fu (Australian National University, Australia); Parastoo Sadeghi (The Australian National University, Australia) | 5-10  |
| **Linear Transceivers for Full Duplex MIMO Relays**                 | Cheng Yu Andy Shang (University of Canterbury, New Zealand); Peter J Smith (The University of Canterbury, New Zealand); Graeme K Woodward (University of Canterbury, New Zealand); Himal A Suraweera (University of Peradeniya, Sri Lanka) | 11-16 |
| **Capacity Approaching Analog Fountain Codes**                      | Mahyar Shirvanimoghaddam (University of Sydney, Australia); Yonghui Li (University of Sydney, Australia); Branka Vucetic (The University of Sydney, Australia) | 17-21 |
| **Low complexity V-BLAST for massive MIMO**                        | Khawla Alnajjar (University of Canterbury, New Zealand); Graeme K Woodward (University of Canterbury, New Zealand); Peter J Smith (The University of Canterbury, New Zealand) | 22-26 |
| **On Parameter Estimation of the Envelope Gaussian Mixture Model**   | Linyun Huang (Monash University, Australia); Yi Hong (Monash University, Australia); Emanuele Viterbo (Monash University, Australia) | 27-32 |
| **Identifying Key Design Parameters for Monte Carlo Simulation of Doppler Spread Channels** | Paul Hirschausen (University of South Australia, Australia); Linda M. Davis (University of South Australia, Australia); David Haley (University of South Australia, Australia); Ken Lever (University of South Australia & Cardiff University, Australia) | 33-38 |
| **Anytime Spatially Coupled Codes for Relay Channel**               | Md Noor-A-Rahim (University of South Australia, Australia); Khoa D. Nguyen (University of South Australia, Australia); Gottfried Lechner (University of South Australia, Australia) | 39-44 |
| **Information Metrics for Model Selection in Function Estimation**  | Tansu Alpcan (The University of Melbourne, Australia)                   | 45-50 |
### Talks 1

#### Plenary 2

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| Folded Successive Cancelation Decoding of Polar Codes | Sinan Kahraman (Istanbul Technical University & Monash University, Australia); Emanuele Viterbo (Monash University, Australia); Mehmet E. Çelebi (Istanbul Technical University, Turkey) | 57-61 |

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| Reducing Codebook Loss by using Reconfigurable Receive Antennas in Limited Feedback Precoded MIMO Systems | Uzma Afshin (University of Canterbury, New Zealand); Peter J Smith (The University of Canterbury, New Zealand); Philippa A. Martin (University of Canterbury, New Zealand) | 62-67 |
| Algorithm to improve the Outage performance of IF Virtual MIMO system | Abdullah Al Nahid (University Of South Australia, Australia); Khoa D. Nguyen (University of South Australia, Australia); Terence H. Chan (University of South Australia, Australia) | 68-72 |
| Maximizing the Coverage-Intensity Product in Random Cellular Networks | Tharaka Samarasinghe (Monash University, Australia); Hazer Inaltekin (Antalya International University, Turkey); Jamie Evans (Monash University, Australia) | 73-78 |
| Correction of In Phase-Quadrature Imbalance in the presence of Multipath Fading | Khandker Nadya Haq (Curtin University of Technology, Australia); Kah-Seng Chung (Curtin University of Technology, Australia) | 79-83 |
| Instantly Decodable Network Codes for Cooperative Index Coding Problem over General Topologies | Shahriar Etemadi Tajbakhsh (The Australian National University, Australia); Parastoo Sadeghi (The Australian National University, Australia); Neda Aboutorab (The Australian National University, Australia) | 84-89 |
| Analysis of Adaptive Least Squares filtering in Massive Mimo | Zeeshan Shaikh (Macquarie University, Australia); Stephen Hanly (Macquarie University, Australia); Iain B. Collings (CSIRO, Australia) | 90-95 |
| Frame-Asynchronous Physical-Layer Network Coding using Cyclic Codes | Bao Nguyen (University of South Australia & Institute for Telecommunications Research, Australia); David Haley (University of South Australia, Australia); Ying Chen (University of South Australia, Australia) | 96-101 |

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Talks 3

Tutorial