

Day 1 - Western Gateway Building - UCC

Registration: 8:30 - 9:00 a.m. in the Atrium, Western Gateway Building, UCC

| Session | Time | Presentation | Author | Affiliation |
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| Morning Session | Co-chairs: Prof. Rao Tummala and Prof. Cian Ó Mathúna | | | |
| Session 1 | Theme: Advanced packaging session 1 | | | |
| Plenary talk | 9:00 - 10:00 a.m. | Emergence of Glass Panel Packaging and 3D Glass Panel Embedded Package For Superior Bandwidth | Prof. Rao Tummala | IBM, Georgia Tech, Retd |
| Paper | 10:00 - 10:25 a.m. | Physical design enablement of 3 dies stacked 3D-Ics | Mohamed Naeim | IMEC |
| Paper | 10:25 - 10:50 a.m. | Impact of Super-long-throw PVD on TSV Metallization and Die-to-Wafer 3D Integration Based on Via-last | Jiayi Shen | Tohoku University |
| Invited talk | 10:50 - 11:20 a.m. | Micro Transfer Printing | Alin Fecioru | Xceleprint |
| Invited talk | 11:20 - 11:50 a.m. | Power Electronics Packaging | Dr. Jayakrishnan Chandrappan | CSA Catapult, UK |
| Paper | 11:50 - 12:15 p.m. | Parallelized Serial Daisy Chain Structure for Continuous In Situ Monitoring of Defect Formation | Andrew Ferris | Sandia Labs |
| Lunch | 12:15 - 2:00 p.m. | Lunch | | |

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| Afternoon Session | Co chairs: Prof. Rao Tummala and Prof. Cian Ó Mathúna | | | |
| Session 2 | Theme: Advanced packaging session 2 | | | |
| Paper | 2:00 - 2:25 p.m. | Chiplet Set For Artificial Intelligence | Joshua Stevens | NCSU |
| Paper | 2:25 - 2:50 p.m. | Patterned InterVia for Heterogeneous Integration of III-V devices onto silicon photonics using micro-Transfer Printing | Ali Uzun | Tyndall |
| Paper | 2:50 - 3:15 p.m. | 3DIC integration with D2D bump-less Cu bonding | Ali Roshanghias | Silicon Austria Labs |
| Paper | 3:15 - 3:40 p.m. | Fast, accurate assembly-level physical verification of 3DIC packages | Nermeen Hossam | Siemens |
| Break | <i>3:40 - 4:00 p.m.</i> | Tea break | | |
| Invited talk | 4:00 - 4:30 p.m. | IC and photonic device fabrication and packaging services | Dr. Romano Hoofman | IMEC |
| Invited talk | 4:30 - 5:00 p.m. | Electrical Interposers for 2.5D and 3D Integration | Dr. Gunnar Böttger | Fraunhofer IZM |
| Paper | 5:00 - 5:25 p.m. | A study on a tether-less approach towards Micro-Transfer-Printing of large-footprint power micro-inductor chiplets | Somnath Pal | Tyndall |
| Paper | 5:25 - 5:50 p.m. | High performance, multi-layered, 2.5D interposer for RF Applications | Matthew Jordan | Sandia Labs |

Day 2 - Western Gateway Building - UCC

Registration: 8:30 - 9:00 a.m. in the Atrium, Western Gateway Building, UCC

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| Morning session | Co chairs: Colette Maloney and Prof. Peter O'Brien | | | |
| Session 3 | Theme: European Chips Act and pilot lines | | | |
| Plenary talk | 9:00 - 9:30 a.m | EU Chip act | Colette Maloney | European Commission |
| Invited talks | 9:30 - 10:00 a.m. | European Packaging Pilot Line | Peter O'Brien | Tyndall |
| Session 4 | Theme: Hybrid Bonding, test metrology and Thermal Management | | | |
| Invited talk | 10:00 - 10:30 a.m. | Product Manager for Hybrid Bonding | Jonathan Abdilla | Besi |
| Paper | 10:30 - 10:55 a.m. | Cu Electrode Surface Features and Cu-SiO ₂ Hybrid Bonding | Murugesan Mariappan | Tohoku University |
| Paper | 10:55 - 11:20 a.m. | Efficient Test Pattern Generation for Large Numbers of Inter-Die Interconnects in Chiplet-Based Packages | Slimane Boutobza | Cadence |
| Paper | 11:20 - 11:45 a.m. | Review of Hybrid Integration Techniques for integrating III-V onto Silicon | Erik Masselink | Gatech |
| Paper | 11:45 - 12:10 p.m. | Thermal cycling and fatigue life analysis of a GaN wide-bandgap laterally conducting power packaging | Pouria Zaghari | NCSU |
| Paper | 12:10 - 12:35 p.m. | SiGe BiCMOS Technology with Embedded Microchannels based on Cu Pillar PCB Integration Enabling sub-THz Microfluidic Sensor Applications | Emre Can Durmaz | Leibniz Institute for High Performance Microelectronics, IHP |
| Lunch | 12:35 - 2:00 p.m. | Lunch | | |

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| Afternoon Session | Co chairs: Colette Maloney and Prof. Peter O'Brien | | | |
| Plenary talk | 2:00 - 3:00 p.m. | Recent Advances in 3D Heterogeneous Integration Capabilities and Future Possibilities | Dr. Paul Fischer | Intel |
| Session 5 | Theme: Emerging Technologies | | | |
| Paper | 3:00 - 3:25 p.m. | Thermal Management Strategies for Co-packaged Optics on Glass Interposers in Next-Generation Photonic Packaging | Parnika Gupta | Tyndall |
| Paper | 3:25 - 3:50 p.m. | Effective release and transfer print of telecom wavelength devices | Hemalatha Muthuganesan | Tyndall |
| Paper | 3:50 - 4:15 p.m. | Single-Mode Expanded-Beam Pluggable Module for Photonic Integrated Circuits | Kamil Gradkowski | Tyndall |
| Paper | 4:15 - 4:40 p.m. | Development of an Ultra High Density Electrical Interposer for 2.5D Co-Packaging of a Silicon Photonic MEMs Chip | Arun Kumar Mallik | Tyndall |
| <i>Social event / Gala dinner</i> | <i>6:00 - 10:00 p.m.</i> | <i>Gala Dinner at the River Lee Hotel</i> | | |
| Day 3 - Tyndall National Institute | | | | |

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| Morning Session | Session Co-chairs: Prof. Peter Ramm and Dr. Kafil Razeeb | | | |
| Session 6 | Theme: System integration and thermal management | | | |
| Tour | 9:00 - 10:00 a.m. | Tyndall Tour | | |
| Plenary talk | 10:00 - 10:45 a.m | TBC | Mark Gerber | ASE Global group |
| Break | 10:45 - 11:00 a.m. | Tea | | |
| Invited talk | 11:00 - 11:30 a.m. | Integrated biomedical systems | Stefan Andersson-Engels | Tyndall |
| Invited talk | 11:30 - 12:00 p.m. | 3D integration for Quantum Computing | Prof. Ryoichi Ishihara | TU Delft |
| Paper | 12:00 - 12:25 p.m. | Thermal insulation in superconducting flip-chip assemblies | Joel Hätingen | VTT |
| Paper | 12:25 - 12:50 p.m. | Measurement Point Selection Algorithms for Testing Power TSVs | Koutaro Hachiya | Teikyo Heisei University, Japan |
| Lunch | 12:50 - 2:00 p.m. | Lunch | | |