## Laser Symposium and ISAM 2023: Detailed Program (as of 23.11.2023, subject to changes)

### THURSDAY | November 30, 2023

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>08:00 – 08:45</td>
<td><strong>Registration</strong></td>
</tr>
<tr>
<td>08:45 – 09:00</td>
<td><strong>OPENING PLENARY: Emerging Technologies</strong></td>
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<tr>
<td></td>
<td>Chair: Christoph Leyers</td>
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<tr>
<td>09:00 – 09:45</td>
<td><strong>Welcome and Opening</strong></td>
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<tr>
<td>09:45 – 10:00</td>
<td><strong>Plenary Talk: Laser as a secondary source</strong></td>
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<tr>
<td></td>
<td>Thomas Rohr</td>
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<tr>
<td>10:00 – 11:30</td>
<td><strong>PLENARY: The ESA Advanced Manufacturing Initiative as Innovation Driver for the European Space Community</strong></td>
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<tr>
<td>10:00 – 10:15</td>
<td><strong>Laserline GmbH: Sustainable high power Laser applications - Theme Moltior</strong></td>
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<tr>
<td>10:15 – 10:35</td>
<td><strong>Asphogelion GmbH: Democratization of Laser Technology - Ake Pihlman</strong></td>
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<tr>
<td>10:35 – 10:45</td>
<td><strong>Laser动力 Line GmbH &amp; Co. KG GmbH: Active Laser Safety Window for N2 and inert Lasers - Jürgen Polakos</strong></td>
</tr>
<tr>
<td>10:45 – 11:00</td>
<td><strong>Fiber Bridge Photonics GmbH: High Power Fiber Arrays for Beam Shaping in Material Processing - Thomas Theng</strong></td>
</tr>
<tr>
<td>11:00 – 11:30</td>
<td><strong>Coffee Break &amp; Exhibition</strong></td>
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### LASER 1: Advanced Laser Sources (Chair: Andreas Wiegand | Fraunhofer IWS)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>11:10 – 11:40</td>
<td><strong>Superior Gas Lasers for Advanced Material Applications</strong></td>
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<td></td>
<td>Stephan Fäh</td>
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<tr>
<td>11:40 – 12:10</td>
<td><strong>Development Trends for Fiber Lasers</strong></td>
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<td>Jens Lampert</td>
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<tr>
<td>12:10 – 12:40</td>
<td><strong>Large Area Processing with Kilowatt Femtosecond Lasers</strong></td>
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<td>Eric Mottey</td>
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<tr>
<td>12:40 – 13:10</td>
<td><strong>Lunch Break &amp; Exhibition</strong></td>
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### LASER 2: Welding (Chair: Axel Andra | Fraunhofer IWS)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>13:20 – 13:50</td>
<td><strong>Thermoplastic Composites in Aeronautics – An Insight into Development of the Largest Full Thermoplastic Aircraft Structure in the World</strong></td>
</tr>
<tr>
<td></td>
<td>Alexei Ushakov</td>
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<tr>
<td>13:50 – 14:20</td>
<td><strong>Laser Welding of Copper – Opportunities, Challenges and Scanning Insights</strong></td>
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<td></td>
<td>Andreas Heider</td>
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<tr>
<td>14:20 – 14:50</td>
<td><strong>Ultra-thin Pulsed Laser Welding: Glasses, Crystals and Metals</strong></td>
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<td>Dustin P. Haedel</td>
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### Coffee Break & Exhibition

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>14:50 – 15:20</td>
<td><strong>Laser 3: Cutting</strong></td>
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<td>Jan Hauptmann</td>
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<td>15:20 – 15:50</td>
<td><strong>Under Water Laser Cutting</strong></td>
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<td>Patrick Henning</td>
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<tr>
<td>15:50 – 16:20</td>
<td><strong>Advantages and Challenges of Sheet Metal Cutting with Increased Laser Power and Mixed Gas</strong></td>
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<td></td>
<td>Andreas Lodt</td>
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<tr>
<td>16:20 – 16:50</td>
<td><strong>Continuous Cutting of Airbag Fabric with Supercapacitor Axs Systems</strong></td>
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<td>Karian Zenger</td>
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### POSTER SESSION

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<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>17:00 – 18:00</td>
<td><strong>LASER 4: Process Monitoring &amp; Control</strong></td>
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<td></td>
<td>Christoph Behrendt</td>
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<tr>
<td>18:00 – 18:40</td>
<td><strong>Are you measuring the right stuff?</strong></td>
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<td></td>
<td>Roy Orton</td>
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<td>18:40 – 19:20</td>
<td><strong>A Theoretical inspection of Welds Using Surrounding Laser Excitation</strong></td>
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<td>Lukáš Musík</td>
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### NETWORKING SESSION

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<th>Time</th>
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<tbody>
<tr>
<td>19:30 – 21:00</td>
<td>Dinner Speech: &quot;Laser Processing – An Evident Idea? And what’s next?&quot;</td>
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<td>Josef Dufour</td>
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### FRIDAY | December 1, 2023

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>08:00 – 08:45</td>
<td><strong>Registration</strong></td>
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<tr>
<td>08:45 – 09:00</td>
<td><strong>PLENARY: New Frontiers in Material Processing</strong></td>
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<td></td>
<td>Chair: Frank Bruckner</td>
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<tr>
<td>09:00 – 09:45</td>
<td><strong>Welcome Note</strong></td>
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<td>Frank Bruckner</td>
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<tr>
<td>09:45 – 10:00</td>
<td><strong>Plenary Talk: Laser goes Hydrogen</strong></td>
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<tr>
<td></td>
<td>Christoph Leyers</td>
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<tr>
<td>10:00 – 10:15</td>
<td><strong>Plenary Talk: Laser goes Battery</strong></td>
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<td>Klaus Löffler</td>
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<tr>
<td>10:15 – 10:25</td>
<td><strong>EXHIBITOR PITCHES</strong></td>
</tr>
<tr>
<td>10:25 – 11:00</td>
<td><strong>ADTEC Dresden GmbH: Laser hardening and cladding systems by ADTEC Dresden - Lukas Chwalewski</strong></td>
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<tr>
<td>11:00 – 11:20</td>
<td><strong>ODAerzkoerbins: Innovations for Laser Wire Deposition - Sebastian Thieme</strong></td>
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<tr>
<td>11:20 – 11:25</td>
<td><strong>DIVE Imaging Systems GmbH: Comprehending the Invisible - Wulf Gutknecht</strong></td>
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<tr>
<td>11:40 – 12:10</td>
<td><strong>Coffee Break &amp; Exhibition</strong></td>
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### LASER 5: Beam Shaping (Chair: Dirk Distl | Fraunhofer IWS)

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<thead>
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<tbody>
<tr>
<td>12:10 – 12:40</td>
<td><strong>Fast Beam Shaping through Coherent Beam Combining</strong></td>
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<td>Karen Schroeder</td>
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<tr>
<td>12:40 – 13:10</td>
<td><strong>Freeform Beam Shaping for Laser Material Processing</strong></td>
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<td></td>
<td>Natalia Trofa-McDonald</td>
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<td></td>
<td>Isabelle Choquet</td>
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<tr>
<td>13:20 – 13:40</td>
<td><strong>Lunch Break &amp; Exhibition</strong></td>
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### LASER 6: Microprocessing (Chair: Andreas Lasch | Fraunhofer IWS)

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<thead>
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<th>Time</th>
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<tbody>
<tr>
<td></td>
<td>Tim Kucke</td>
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<tr>
<td>14:10 – 14:20</td>
<td><strong>Flexible Processing of Organic Photovoltaic Modules with Laser Systems</strong></td>
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<td></td>
<td>Finn-Steffen Kase</td>
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<tr>
<td>14:20 – 14:30</td>
<td><strong>Cutting and Microcutting Challenges with Beam Shaping</strong></td>
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<td>Sebasian Palder</td>
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<td>14:30 – 14:40</td>
<td><strong>Short Break</strong></td>
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### ISAM 4: Surface Processing in AM (Chair: Marko Greifzu | Fraunhofer IWS)

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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>14:40 – 15:10</td>
<td><strong>Internal and External Laser Cladding of Tiss Brauns for Sliding Bearings</strong></td>
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<td>Janos Freimutter</td>
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<tr>
<td>15:10 – 15:20</td>
<td><strong>Oblique Approach of a Surface Functionalized Cost Iron Brake Disc</strong></td>
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<td>Renal Barrich</td>
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<td>15:20 – 15:30</td>
<td><strong>Latest Developments in Cladding and Additive Manufacturing with Diode Lasers</strong></td>
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<td>Simon Zeynel</td>
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### LASER 7: Coating and Thermo Coating (Chair: Markus Scheller | Fraunhofer IWS)

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<tr>
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<tbody>
<tr>
<td>15:30 – 15:40</td>
<td><strong>EXHIBITION</strong></td>
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<tr>
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<td><strong>Online</strong></td>
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<tr>
<td>15:40 – 16:10</td>
<td><strong>Environmentally friendly laser technologies: oxide and nitride coatings</strong></td>
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<td>Dominik Oehne</td>
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<tr>
<td>16:10 – 16:30</td>
<td><strong>Closing Plenary</strong></td>
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<td></td>
<td>Chair: Christoph Leyers</td>
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<tr>
<td>16:30 – 17:00</td>
<td><strong>Coffee Break &amp; Exhibition</strong></td>
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### accompanying Industrial Exhibition