

**Programme of the  
8<sup>th</sup> International Workshop on  
Electric Probes in Magnetized Plasmas  
Innsbruck, Austria, September 2009**

Ground floor of Victor-Franz-Hess-Haus, Technikerstr. 25, Innsbruck,  
Auditorium (Hörsaal – HS) F and Foyer in front of it

Timing: 15 min presentation + 5 min discussion.

**Sunday, September 20<sup>th</sup>**

<b>17:00 – 19:00</b>	<b>Registration</b>
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**Monday morning, September 21<sup>st</sup>**

<b>08:00 – 08:45</b>	<b>Registration</b>
<b>08:45 – 09:00</b>	<b>Opening Ceremony</b>
<b>09:00 – 10:20</b>  <b>Chairperson:</b> Milan Čerček	<ol style="list-style-type: none"> <li>1. <b>R. Stenzel</b>, <i>Time-dependent probe effects in magnetized plasmas</i> (topic 1)</li> <li>2. <b>A. K. Sarma</b>, <i>Measurement of plasma parameters in a positively biased plasma source</i> (topic 2)</li> <li>3. <b>S. Marsen, M. Otte, F. Steffen, and F. Wagner</b>, <i>Poloidal and toroidal asymmetries in turbulence activity in the WEGA stellarator</i> (topic 4)</li> <li>4. <b>R. Hatakeyama</b>, <i>Measurements of mode structure of shear-modified drift wave using Y- and <math>\Gamma</math>-shaped electrostatic probes</i> (topic 4)</li> </ol>
<b>10:20 – 10:40</b>	<b>Coffee Break</b>
<b>10:40 – 12:00</b>  <b>Chairperson:</b> Michael Laux	<ol style="list-style-type: none"> <li>1. <b>M. Hannemann</b>, <i>New method for the determination of the electron temperature from Langmuir probe characteristics</i> (topic 9)</li> <li>2. <b>V. I. Demidov</b>, <i>Short dc discharge with wall probe as a gas analytical detector</i> (topic 9)</li> <li>3. <b>M. Komm</b>, <i>Particle-in-cell simulations of the ball-pen probe</i> (topic 9)</li> <li>4. <b>Tsv. K. Popov</b>, <i>Second derivative Langmuir probe diagnostics of gas discharge plasma at intermediate pressures</i> (topic 9)</li> </ol>
<b>12:00 – 13:30</b>	<b>Lunch</b>

## Monday afternoon, September 21<sup>st</sup>

<b>13:30 – 14:00</b>	<b>Registration</b>
<b>14:00 – 15:20</b>  <b>Chairperson:</b> Gheorghe Popa	<ol style="list-style-type: none"> <li>1. <b>L. Conde</b>, <i>Measurements of plasma properties using fast sweep Langmuir probes in unmagnetized weakly ionized plasmas</i> (topic 6)</li> <li>2. <b>J. M. Donoso</b>, <i>On the measurements of plasma properties using Langmuir probes for weakly ionized plasmas under drifting electrons populations</i> (topic 6)</li> <li>3. <b>V. A. Godyak</b>, <i>Electron energy distribution function in low pressure rf discharge</i> (topic 6)</li> <li>4. <b>N. Kurahara</b>, <i>Plasma energy spectrum measurement with two-stage parallel plate electrostatic analyzer for spacecraft charging potential determination</i> (topic 10)</li> </ol>
<b>15:20 – 15:40</b>	<b>Coffee Break</b>
<b>15:40 – 17:00</b>  <b>Chairperson:</b> Jan Stöckel	<ol style="list-style-type: none"> <li>1. <b>T. Suzuki</b>, <i>Thermal plasma effects on the impedance probe measurements in the ionosphere</i> (topic 10)</li> <li>2. <b>G. Zhong</b>, <i>Preliminary design on ITER divertor Langmuir probes</i> (topic 11)</li> <li>3. <b>J. P. Gunn</b>, <i>Report on the physics and technical performance of the Tore Supra tunnel probe</i> (topic 11)</li> <li>4. <b>G. De Masi</b>, <i>Flow measurements in the edge region of the RFX-mod experiment</i> (topic 11)</li> </ol>
<b>17:00 – 17:30</b>	<b>Registration</b>
<b>19:00 – 23:00</b>	<b>Informal welcome dinner (Griechische Taverne, Kranebitter Allee 144 – within walking distance from the meeting site!)</b>

## Tuesday, September 22<sup>nd</sup>

<b>08:30 - 10:10</b>  <b>Chairperson:</b> Milan Tichý	<ol style="list-style-type: none"> <li>1. <b>F. Gennrich</b>, <i>Wavelet analysis of plasma edge turbulence probe measurements and simulations</i> (topic 11)</li> <li>2. <b>L. N. Mishra</b>, <i>Electron energy distribution in the Njörd rf plasma by means of an analogue differentiation method</i> (topic - other)</li> <li>3. <b>M. Y. Ye</b>, <i>Developments of divertor target-imbedded Langmuir probes for W7-X</i> (topic 5)</li> <li>4. <b>K. Todoroki</b>, <i>Influence of ion Larmor radius on radial profile of ion temperature measured by ion sensitive probe</i> (topic 3)</li> <li>5. <b>K. Uehara</b>, <i>Electrostatic probes for studying transport properties in tokamak plasmas</i> (topic 3)</li> </ol>
<b>10:10 – 10:30</b>	<b>Coffee Break</b>
<b>10:30 - 12:10</b>  <b>Chairperson:</b> Jamie Gunn	<ol style="list-style-type: none"> <li>1. <b>M. Kočan</b>, <i>Ion temperature measurements in the Tore Supra scrape-off layer using a retarding field analyzer</i> (topic 3)</li> <li>2. <b>W. Tierens</b>, <i>A novel cylindrical probe for measuring the ion temperature in magnetized plasmas</i> (topic 3)</li> <li>3. <b>Y. Tomita</b>, <i>Particle flux to spherical probe in weak magnetic field</i> (topic 8)</li> <li>4. <b>H. W. Müller</b>, <i>Towards fast electron temperature measurements in the SOL of ASDEX Upgrade</i> (topic 11)</li> <li>5. <b>J. Adámek</b>, <i>Ball-pen probe measurements in L-mode and H-mode on ASDEX Upgrade</i> (topic 11)</li> </ol>
<b>12:10 – 13:40</b>	<b>Lunch</b>
<b>14:00</b>	<b>Departure Bus into town for Excursion</b> (on Technikerstraße, near O-Bus station)
<b>14:15 – <math>\cong</math> 17:30</b>	<b>Excursion in town</b> (after that bus will return to Technikerstraße)
<b>18:30</b>	<b>Departure from Technikerstraße for guided walking tour</b> (really very easy) to <b>Kranebitter Klammstub'n</b>
<b>19:00 – 23:00</b>	<b>Banquet in Kranebitter Klammstub'n, Klammstraße 11</b>

## Wednesday morning, September 23<sup>rd</sup>

<p><b>08:40 - 10:20</b></p> <p><b>Chairperson:</b> Reiner Stenzel</p>	<ol style="list-style-type: none"> <li>1. <b>R. W. Schrittwieser</b>, <i>A Probe Head for Simultaneous Measurements of Electrostatic and Magnetic Fluctuations in ASDEX Upgrade Edge Plasma</i> (topic 11)</li> <li>2. <b>I. S. Nedzelskiy</b>, <i>Mass-sensitive ion probe for edge plasma characterization on the tokamak ISTTOK</i> (topic 11)</li> <li>3. <b>M. A. Razzak</b>, <i>Probe diagnostics in microwave plasma jets at atmospheric pressure</i> (topic 12)</li> <li>4. <b>J. Kousal</b>, <i>Double probe measurements in magnetically enhanced RF plasma source at pressures below 0.1 Pa</i> (topic 12)</li> <li>5. <b>M. Tichý</b>, <i>Spatial distribution of plasma parameters in dc-energized hollow cathode plasma jet</i> (topic 12)</li> </ol>
<b>10:20 – 10:40</b>	<b>Coffee Break</b>
<p><b>10:40 – 12:00</b></p> <p><b>Chairperson:</b> Rikizo Hatakeyama</p>	<ol style="list-style-type: none"> <li>1. <b>P. Kudrna</b>, <i>A study of plasma parameters in hollow cathode plasma jet in pulse regime</i> (topic 12)</li> <li>2. <b>S. Saito</b>, <i>Development of asymmetric double probe formula and its application for collisional plasma</i> (topic 12)</li> <li>3. <b>J.-G. Bak</b>, <i>Electrical probe diagnostics for the KSTAR</i> (topic 11)</li> <li>4. <b>M. L. Solomon</b>, <i>Multi-channel analyzer investigations of ion flux at the target surface in Pilot-PSI</i> (topic 11)</li> </ol>
<b>12:00 – 13:30</b>	<b>Lunch</b>

## Wednesday afternoon, September 23<sup>rd</sup>

<b>13:30 – 14:00</b>	<b>Session International Scientific Committee</b>
<p><b>14:00 – 15:20</b></p> <p><b>Chairperson:</b> Valery Godyak</p>	<ol style="list-style-type: none"> <li>1. <b>N. Ezumi</b>, <i>Ion temperature measurements of the LHD stochastic magnetic boundary plasma using an ion sensitive probe</i> (topic 11)</li> <li>2. <b>S. K. Karkari</b>, <i>Application of floating hairpin probe in strongly magnetized plasma</i> (topic 11)</li> <li>3. <b>Tsv. K. Popov</b>, <i>Plasma potential and electron energy distribution function measured by Langmuir probe in tokamak edge plasma</i> (topic 11)</li> <li>4. <b>C. Ribeiro</b>, <i>A new look at fluctuation driven particle flux inferred by electrostatic triple probes</i> (topics 1, 2, 4, 7, 11)</li> </ol>
<b>15:20 – 15:40</b>	<b>Coffee Break</b>
<p><b>15:40 – 17:00</b></p> <p><b>Chairperson:</b> Emilio Martines</p>	<ol style="list-style-type: none"> <li>1. <b>C. Ionita</b>, <i>Emissive probes for the diagnostics of the plasma potential in fusion experiments</i> (topic 11)</li> <li>2. <b>T. Gyergyek</b>, <i>Floating potentials in two-electron temperature plasma with two species of positive ions: theory and experiment</i> (topic 7)</li> <li>3. <b>D. Tskhakaya</b>, <i>Interpretation of Langmuir probe measurements during ELMs</i> (topic 7, 11)</li> <li>4. <b>S. Kuhn</b>, <i>Numerical matching of the sheath and plasma solutions for a spherical probe in low-density plasma</i></li> </ol>
<b>17:00 – 17:30</b>	<b>Closing Ceremony</b>

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International Workshop  
"50 Years Plasma Physics in Innsbruck"  
Innsbruck, Austria, September 2009**

**Ground floor of Victor-Franz-Hess-Haus, Technikerstr. 25, Innsbruck,  
Auditorium (Hörsaal – HS) F and Foyer in front of it**

Timing: 25 min presentation + 5 min discussion.

**Thursday, September 24<sup>th</sup>**

<b>08:45 – 09:00</b>	<b>Opening Ceremony</b>
<b>09:00 - 10:30</b>  <b>Chairperson:</b> Roman Schrittwieser	<ol style="list-style-type: none"> <li>1. <b>Ferdinand Cap</b>, <i>The application of the Crocco theorem of neutral gasdynamics on plasmas</i></li> <li>2. <b>Padma Kant Shukla</b>, <i>Fundamentals of dusty plasma physics: An Interdisciplinary Research Field</i></li> <li>3. <b>Gheorghe Popa</b>, <i>A short history of Innsbruck – Iași collaboration in scientific research</i></li> </ol>
<b>10:30 – 11:00</b>	<b>Coffee Break</b>
<b>11:00 – 12:00</b>  <b>Chairperson:</b> Siegbert Kuhn	<ol style="list-style-type: none"> <li>1. <b>Rikizo Hatakeyama</b>, <i>Collisionless drift waves ranging from current-driven, shear-modified, and electron-temperature-gradient modes</i></li> <li>2. <b>Jens Juul Rasmussen</b>, <i>The Q-machine: the plasma for waves and instabilities</i></li> </ol>
<b>12:00 – 13:30</b>	<b>Lunch</b>
<b>13:30 – 15:00</b>  <b>Chairperson:</b> Padma K. Shukla	<ol style="list-style-type: none"> <li>1. <b>Milan Čerček</b>, <i>On the use of electron emitting probes in magnetized discharge plasma</i></li> <li>2. <b>Volker Naulin</b>, <i>On the role of blobs and holes in edge plasma</i></li> <li>3. <b>Victor Ciupina</b>, <i>Synthesis and characterization of some carbon-based nanostructures</i></li> </ol>
<b>15:00 – 15:30</b>	<b>Coffee Break</b>
<b>15:30 – 16:30</b> <b>Chairperson:</b> Codrina Ionita	<ol style="list-style-type: none"> <li>1. <b>Reiner Stenzel</b>, <i>Contributions to fireball research in Innsbruck</i></li> <li>2. <b>Dan Gheorghe Dimitriu</b>, <i>Nonlinear effects related to the simultaneous excitation of three low-frequency instabilities in magnetized plasma</i></li> </ol>
<b>16:30 – 17:30</b>	<b>Closing Ceremony and Slide Show (once upon a time ...)</b>
<b>18:00 – 19:00</b>	<b>Guided "hiking tour" (easy walk on a little upward slope) to the famous Buzihütte</b>
<b>19:00 - .....</b>	<b>Dinner Party in Buzihütte</b>
<b>Whenever</b>	<b>Return on your own</b>

**Friday, September 25<sup>th</sup>**

<b>09:00 – 12:00</b>	<b>Discussions, Laboratory tours (upon arrangement with the organizers)</b>
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