Programme of the international workshop on **Ion Propulsion and accelerator industrial applications** (IPAIA2017), 1st to 3rd March 2017

March, 1st

Poster session 15-17:30 (1st floor meeting room (m. r.) atrium)

Registration desk 15-17:00 (5th floor meeting room)

Poster session (1st floor m.r. atrium) 15-17:30

It is recommended that posters are pin up in this session or in the following morning before the coffee break end. Posters can stay up for the whole conference duration.

March, 2nd

Registration 8:45-9:15 (1st floor meeting room (m. r.) atrium)

Registration desk 8:45-15:00 (1st floor m. r. atrium)

| Speaker | Title | Place / Time |
|--|---|------------------------------|
| | Morning session (session chair: F. Taccogna) | (1 st floor m.r.) |
| Olga De Pascale | Welcome | 9.00-9.10 |
| Kathe Danenmayer ESA (NE) | ESA perspectives on EP | General 9:10-9:40 |
| Tommaso Misuri SITAEL (IT) | Low Power Electric Propulsion Activities at SITAEL | Hall Thruster 9:40-10:10 |
| Mariano Andrenucci SITAEL (IT) | High Power Hall Thruster Design | HT 10:10-10:40 |
| Coff | ee break (25-30 min, 1 st floor m. r. atrium) | 10:45-11:10 |
| Stephane Mazouffre | Hall thruster technology: from classical to wall-less | HT |
| CNRS-ICARE (FR) | architecture | 11:10-11:40 |
| Jacek Kurzyna IPPLM (PL) | Development of IPPLM's krypton HET | HT 11:40-12:10 |
| Amnon Fruchtman | Configuration of a collisional Hall thruster | HT |
| HIT (IL) | | 12:10-12:40 12:40-12:50 |
| | Short announcements or discussion or poster previews; group photo Lunch (75 min) | 12:50-14:05 |
| | Afternoon session (session chair: S. Mazouffre) | (1 st floor m.r.) |
| Igal Kronhaus | Concepts in Low Power Hall Thruster Design - A Personal | HT |
| Technion (IL) | Perspective | 14:05-14:35 |
| Laurent Garrigues CNRS-LAPLACE (FR) | Hybrid modeling of single and double stage Hall thrusters | Modeling 14:35-15:05 |
| Julia Duras | Kinetic modeling of electrostatic ion thrusters | M |
| Nuremberg Inst. of Tech. (DE) | _ | 15:05-15:35 |
| | 15:35-16:00 | |
| | Poster Session (1st floor m.r. atrium) | 16:00-17:15 |

For speakers: Oral presentation time is 25 min plus 5 min for question and answers; contact us if more time needed or order of presentation need changes. Posters can stay up for the whole conference duration (staff can take care of removing them at conference end).

Visit to Polignano a Mare (please be sure to inform local organizing committee of your participation and of hotel of your stay) Bus(es) depart at 17.20

Special session: oral presentation "The ion propulsion as a collaborative effort between research institutes, and with industry" 19.30-20.00

Social dinner (optional) 20:00-22

Return to Bari (with 3 selected stops convenient for hotels) 22.30-23:30

(note: social dinner in Polignano cannot be covered by conference organization; bus is covered; more info to come)

March, 3rd

| Vivien Croes | Morning session Electron drift instability and secondary electron emission | (1 st floor m.r.) |
|--|---|-------------------------------|
| Vivien Croes | Flectron drift instability and secondary electron emission | |
| | | M |
| Ecole PolytecLPP (FR) | in Hall effect thrusters: an insight from bi-dimensional | 09:00-09:30 |
| | particle-in-cell simulations | |
| Francesco Taccogna CNR-Nanotec (IT) | Hall Thruster numerical tool | M 09:30-10:00 |
| Gianpiero Colonna | Vibrational Kinetics of Electronically Excited States in H2 | M |
| CNR-Nanotec (IT) | Discharges | 10:00-10:30 |
| Peirluigi Veltri | Status of NIO1 negative ion source and acceleration | 10:30-10:50 |
| INFN (IT) | system | |
| | Coffee break (25 min) | 10:50-11:15 |
| Francesco Taccogna | Hall thruster used as molecular gas dissociator | M |
| CNR-Nanotec (IT) | | 11:15-11:35 |
| Giuseppe Torrisi | Modeling the electromagnetic field in anisotropic | M |
| INFN-LNS (IT) | inhomogeneous magnetized plasma of ECR ion sources | 11:35-12:05 |
| Mario Merino UC3M (ES) | Ion acceleration by magnetic nozzles | Ion Propulsion 12:05-12:35 |
| Daniele Pavarin | Helicon Propulsion Technology perspective for small | IP |
| Univ. di Padova (IT) | satellites | 12:35-13:05 |
| | Lunch (75 min) | 13:05-14:20 |
| | Afternoon session (session chair: M. Cavenago) | |
| Andrea Lucca Fabris | Ion Acceleration Mechanism in a Quad Confinement | IP |
| SSC (UK) | Thruster | 14:20-14:50 |
| Igor Kaganovich | Experimental and theoretical study of ion beam | IP |
| PPPL (USA) | neutralization by plasma | 14:50-15:20 |
| Mario Panelli | CIRA IMP-EP project: development and validation of a 1D | Cathode Technology |
| CIRA (IT) | model for hollow cathode analysis and design | 15:20-15:50 |
| | Coffee break (30 min) | 15:50-16:20 |
| Fabrizio Paganucci | Development of hollow cathodes for electric thrusters: | CT |
| Univ. di Pisa (IT) | theoretical and experimental results | 16:20-16:50 |
| All | General discussion | 16:50-17:15 |
| Marco Cavenago INFN-LNL | Documentation and closing remarks | 17:15-17:25 |

(for speakers: Typical oral presentation time is 25 min plus 5 min for question and answers, unless otherwise noted; contact us if more time needed or order of presentation need changes)

It is recommended that posters will be further discussed during coffee and other breaks, and be removed after last coffee break. Remaining posters will be removed by staff at the end.

| Presenter | Poster list | id |
|---------------------|---|----|
| Marco Cavenago | Small rf plasma generator for air | P1 |
| Antoine Tavant | Wall interactions in Hall Effect Thruster, investigation with bidimensional Particle-in-cell model and simulation | P2 |
| Florian Marmuse | A first review of facility effects on electric thruster testing | Р3 |
| Grazia Cicala | Carbon-based materials for cathode neutralizers in electric propulsion | P4 |
| Romain Lucken | Improvements in global modelling of gridded ion thrusters | P5 |
| Francesco Micchetti | Hall Thruster numerical tool - Demo | Р6 |