

Session Program

17-22 Jun 2018



15th European Vacuum Conference (EVC-15)
Vacuum Science & Technology

Monday 18 June

09:55

Vacuum Science & Technology: 1

Session | **Location:** CICG, Room 4 | **Convener:** Karl Jousten

09:55-10:15

Development of 30 and 1000 Torr Full-Scale Optical Diaphragm Gauges

Speaker

Janos Marki

10:15-10:35

Conceptual consequences of the NewSI to the unit of pressure

Speaker

Dr Dominik Prazak

10:35-10:55

The End of Mercury Manometers with the Quantum-Based Pascal

Speaker

Jay Hendricks

10:55

11:15

Vacuum Science & Technology: 1

Session | **Location:** CICG, Room 4 | **Convener:** Karl Jousten

11:15-11:35

Development of a new UHV/XHV pressure standard (Cold Atom Vacuum Standard)

Speaker

Julia Scherschligt

11:35-11:55

Simulation of an extractor ionisation gauge

Speaker

Nenad Bundaleski

11:55-12:15

Electron source for an improved hot cathode ion gauge

Speaker

Mr Claus Illgen

12:15

Tuesday 19 June

09:30

Vacuum Science & Technology: 2

Session | **Location:** CIG, Room 4 | **Convener:** Janos Marki

09:30–09:50

New aluminium beam pipe upgrade for the LHC experiments during the LS2

Speaker

Chiara Di Paolo

09:50–10:10

Particle free ESS vacuum system

Speaker

Christophe Jarrige

10:10–10:30

Combining NEG pump and an XHV BNNT cryopump

Speaker

Marcy Stutzman

10:30

10:50

Vacuum Science & Technology: 2

Session | **Location:** CIG, Room 4 | **Convener:** Janos Marki

10:50–11:10

Pressure evolution in a 3D microcavities array

Speaker

Ana Fonseca

11:10–11:30

Measurement of the radiation tolerance of vacuum pumps

Speaker

Dr Andrew Chew

11:30–11:50

Development and optimization of small diameter copper electroformed getter coated vacuum chambers

Speaker

Lucia Lain Amador

11:50

13:20

Vacuum Science & Technology: 3

Session | **Location:** CIG, Room 4 | **Convener:** Dr Martin Wüest

13:20–13:40

Development of a Neutral Gas- and Ion-Mass Spectrometer for Jupiter's Moons

Speaker

Dr Stefan Mayer

13:40–14:20

Advancement in transient flow simulation: application to measurements of porous media permeability and tube conductance

Speaker

Prof. Irina Graur Martin

15:00

15:20

16:40

14:20-14:40

Determination of the pressure in a TO vacuum package using a micro Pirani

Speaker

Mr Christoph Langer

14:40-15:00

Ion pump design to minimize particle emissions

Speaker

Mauro Audi

Vacuum Science & Technology: 3

Session | **Location:** CICG, Room 4

15:20-15:40

Outgassing and gas uptake properties of vacuum and 3D printed materials

Speaker

James Fedchak

15:40-16:00

Comparative Measurements of Ion Pump pumping speed according to ISO/DIS 3556 and DIN 28429

Speaker

Stefan Meierott

16:00-16:20

Design and Manufacturing of a wireless SAW-Pirani sensor with extended range

Speaker

Sofia Toto

16:20-16:40

Gas Modulation Refractometry for High-Precision Assessment of Pressure under Non-Temperature-Stabilized Conditions

Speaker

Dr Martin Zelan

Wednesday 20 June

09:30

Vacuum Science & Technology: 4

Session | **Location:** CIG, Room 4 | **Convener:** Irina Graur Martin

09:30–09:50

Adhesive bonding: applications and perspectives in UHV

Speaker

Dr Michael Flämmich

09:50–10:10

New design flexibility for non-magnetic UHV chambers by using AluVaC®-Technology

Speaker

Maximilian Biethahn

10:10–10:30

High Vacuum set-up for permeability and diffusivity measurements of vacuum materials

Speaker

Giuseppe Firpo

10:30

10:50

Vacuum Science & Technology: 4

Session | **Location:** CIG, Room 4 | **Convener:** Irina Graur Martin

10:50–11:10

Calibration of helium leak rate down to 10-14 Pa m³/s for leak testing of MEMS

Speaker

Hajime Yoshida

11:10–11:30

A Novel vacuum gauge: Applications for Pressure Measurement, He-Leak detection and Residual Gas Analysis

Speaker

Mihail Granovskij

11:30–11:50

Measurement of permeability of low permeable membranes

Speaker

Mr Martin-Viktor Johansson

11:50–12:10

A novel wide-range apparatus developed for performance testing of molecular pump

Speaker

Mr Lu Yaowen

12:10

13:20

Vacuum Science & Technology: 5**Session** | **Location:** CIG, Room 4 | **Convener:** Jay Hendricks**13:20–13:40****Ensuring well defined quality of vacuum components - a combined user and manufacturer perspective****Speaker**

Mr René Bauer

13:40–14:00**Monitoring of volatile vacuum species using remote optical emission spectroscopy****Speaker**

Dermot Monaghan

14:00–14:20**Development and first investigations of a new static expansion system based on aluminum technology****Speaker**

Dr Karl Jousten

14:20–14:40**Simulation and measurement of the deuterium retention in the cryogenic beamline of the KATRIN experiment****Speaker**

Joachim Wolf

14:40–15:00**An analysing tool for analogue residual gas spectra in UHV implying machine-learning applications****Speaker**

Berthold Jenninger

15:00

Thursday 21 June

09:30

Vacuum Science & Technology: 6

Session | **Location:** CICG, Room 4 | **Convener:** Marcy Stutzman

09:30–09:50

Thermal Analysis of Large-scale Cryopump Used in Large Vacuum Leak Detecting System

Speaker

Mr Yueshuai Zhao

09:50–10:10

Structural Improvement of Multiple-Cavity Dry Scroll Vacuum Pump

Speaker

Prof. Kun Liu

10:10–10:30

The optimisation and simulation of vacuum plume field in ground testing for electric thrusters

Speaker

Mr Junwei Wang

10:30

10:50

Vacuum Science & Technology: 6

Session | **Location:** CICG, Room 4 | **Convener:** Marcy Stutzman

10:50–11:10

Integrated Testing Method of Pumping Performance for Dry Vacuum Pump

Speaker

Mr Kun Liu

11:10–11:30

Conditioning methods to reduce ion-induced desorption

Speaker

Markus Bender

11:30–11:50

Variational Principles and Applications of Local Topological Constants of Motion for Non-Barotropic Magnetohydrodynamics

Speaker

Prof. Asher Yahalom

11:50