

## 8. Scientific Program

Note about the acronyms used to identify the sessions:

The first character (n) of the session codes always refers to the day:

1 = Monday, 2 = Tuesday, 3 = Wednesday, 4 = Thursday.

The last character (m) of the session codes always identifies the growing presentation number.

Plenary Sessions: nPLm

Talks: nX-YY-Zm

X → M = Morning, A = Afternoon;

YY → EL (Electronic), LS (Large Scale), MA (Materials), WT (Wires and Tapes), WL (joint session Wires and Tapes and Large Scale), SS (Special Session);

Z → I = Invited, O = Oral;

Poster: nP-YYp-m

P → Poster;

YY → EL (Electronic), LS (Large Scale), MA (Materials), WT (Wires and Tapes);

p is the growing number identifying the session.

[4M-MA1] <b>Pinning and Flux Dynamics II</b> Room Levante e Ponente ..	144
[4M-MA2] <b>HTS Films and Multilayers II</b> Room Maestrale .....	145
[4M-WT] <b>BSCCO and Fe-based Wires</b> Room Libeccio .....	146

## 8.4 Poster sessions

All poster sessions will take place in Module 7, 3<sup>rd</sup> floor (main poster hall) and in Module 8, 1<sup>st</sup> and 2<sup>nd</sup> floor, with the following schedule:

**Monday September 16<sup>th</sup> from 14:15 to 15:45**

[1P-EL1] <b>Junction and Circuit Fabrication</b> .....	15
[1P-EL2] <b>Squid Design and Fabrication</b> .....	18
[1P-EL3] <b>Microwaves and THz Devices I</b> .....	20
[1P-LS1] <b>Power Transmission Lines</b> .....	22
[1P-LS2] <b>Power Devices I (motors, generators and smes)</b> .....	24
[1P-LS3] <b>High Field, MRI and Innovative Magnets</b> .....	27
[1P-LS4] <b>Fusion</b> .....	29
[1P-MA1] <b>Fe-based Superconductors - Bulk I</b> .....	30
[1P-MA2] <b>Transport and Magnetic Properties</b> .....	32
[1P-MA3] <b>Pinning and Flux Dynamics I</b> .....	35
[1P-MA4] <b>Fe-based Superconductors Thin Films and Multilayers</b> ....	37
[1P-WT1] <b>MgB<sub>2</sub></b> .....	40
[1P-WT2] <b>LTS</b> .....	44
[1P-WT3] <b>Coated Conductors I</b> .....	45

**Tuesday September 17<sup>th</sup> from 14:15 to 15:45**

[2P-EL1] <b>Biomedical Squid Applications</b> .....	59
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[2P-EL2] <b>Digital and Quantum Circuits and Systems</b> .....	62
[2P-EL3] <b>Detectors I</b> .....	64
[2P-LS1] <b>Fault Current Limiters I</b> .....	67
[2P-LS2] <b>Energy Systems (power transmission lines and energy applications)</b> .....	69
[2P-LS3] <b>Magnetic Levitation Bearings and Other Applications</b> .....	71
[2P-LS4] <b>Current Leads</b> .....	73
[2P-MA1] <b>Ac losses, Stability and Quench</b> .....	74
[2P-MA2] <b>HTS films and Multilayers I</b> .....	75
[2P-MA3] <b>Fe-based Superconductors - Bulk II</b> .....	78
[2P-MA4] <b>Other Bulk Materials including Novel Materials</b> .....	81
[2P-MA5] <b>Pinning and Flux Dynamics II</b> .....	82
[2P-WT1] <b>Modeling of Thermal, Electrical and Mechanical Properties</b> .....	84
[2P-WT2] <b>Thermal, Electrical and Mechanical Characterization</b> .....	86
[2P-WT3] <b>BSCCO and Fe-based Superconductors</b> .....	89
[2P-WT4] <b>Critical Current and Flux Pinning</b> .....	90

**Wednesday September 18<sup>th</sup> from 14:15 to 15:45**

[3P-EL1] <b>Other Squid Applications</b> .....	105
[3P-EL2] <b>Microwaves and THz Devices II</b> .....	109
[3P-EL3] <b>Detectors II</b> .....	111
[3P-LS1] <b>Fault Current Limiters II</b> .....	113
[3P-LS2] <b>Power Devices II (motors, generators and transformers)</b> .....	115
[3P-LS3] <b>Modeling</b> .....	117
[3P-LS4] <b>Accelerators</b> .....	119

### 2P-EL3-03

#### **High Linearity Voltage Response Parallel-Array Cell**

Kornev V.<sup>1</sup>, Kolotinskiy N.<sup>1</sup>, Skripka V.<sup>1</sup>, Sharafiev A.<sup>1</sup>, Soloviev I.<sup>1</sup>, Mukhanov O.<sup>2</sup>

<sup>1</sup>Moscow State University - Russian Federation, <sup>2</sup>HYPRES, Inc., Elmsford, NY 10523 - United States

### 2P-EL3-04

#### **Bi-SQUID Noise Characteristics**

Sharafiev A.<sup>1</sup>, Kornev V.<sup>1</sup>, Soloviev I.<sup>1</sup>, Mukhanov O.<sup>2</sup>, Kolotinskiy N.<sup>1</sup>

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### 2P-EL3-05

#### **Superconducting nanowire single-photon detector base on the new optic cavity**

Gu M.<sup>1</sup>, Kang L.<sup>1</sup>, Zhang L.<sup>1</sup>, Jia X.<sup>1</sup>, Tu X.<sup>1</sup>, Jia T.<sup>1</sup>, Yang X.<sup>1</sup>, Zhao L.<sup>1</sup>

<sup>1</sup>Nanjing University - China

### 2P-EL3-06

#### **Experimental Investigation of Hybrid Superconductor-Ferromagnet Multi-Terminal Devices**

Prokopenko G.<sup>1</sup>, Nevirkovets I.<sup>2</sup>, Mukhanov O.<sup>1</sup>, Chernyashevskiy O.<sup>2</sup>, Ketterson J.<sup>2</sup>

<sup>1</sup>HYPRES, Inc., Elmsford, NY 10523 - United States, <sup>2</sup>Northwestern University, Department of Physics & Astronomy, Evanston IL 60201 - United States

### 2P-EL3-07

#### **Transient dynamics in driven long Josephson junctions**

Guarcello C.<sup>1</sup>, Valenti D.<sup>1</sup>, Spagnolo B.<sup>1</sup>

<sup>1</sup>Dipartimento di Fisica e Chimica, Università di Palermo e CNISM - Italy

### 2P-EL3-08

#### **Mega-pixel Neutron Radiography with High Spatial Resolution by Current-Biased Kinetic Inductance Detectors of Nb with 10B Converter**

Ishida T.<sup>1</sup>, Yoshioka N.<sup>1</sup>, Narukami Y.<sup>1</sup>, Yagi I.<sup>1</sup>, Kodama Y.<sup>1</sup>, Shishido H.<sup>1</sup>, Miyajima S.<sup>2</sup>, Fujimaki A.<sup>2</sup>

<sup>1</sup>Osaka Prefecture University - Japan, <sup>2</sup>Department of Quantum Engineering, Nagoya University - Japan

### 2P-EL3-09

#### **Detection of X-ray photons by Niobium Josephson tunnel junction with trapped Abrikosov vortices**

Lisitskiy M.P.<sup>1</sup>, Camerlingo C.<sup>1</sup>

<sup>1</sup>Istituto di Cibernetica "E. Caianiello" del Consiglio Nazionale delle Ricerche - Italy

### 2P-EL3-10

#### **Cooling method dependence of current-voltage characteristics for**