Scientific Program

Sunday, November 30

Arrival

18:00 – 20:00 Registration / Reception

Monday, December 1

Opening 9:00 – 9:10

Session: THz emission I 9:10 – 10:50 (Chair: Lutfi Ozyuzer)

9:10 – 9:35 **Reinhold Kleiner** 1
Hot spots and THz waves in $Bi_2Sr_2CaCu_2O_8$ intrinsic Josephson junction stacks: Recent developments

9:35 – 10:00 **Takanari Kashiwagi** 2
Development of THz imaging systems by using an IJJ emitter

10:00 – 10:25 **Ulrich Welp** 3
Current filamentation in large $Bi_2Sr_2CaCu_2O_{8+\delta}$ mesa devices observed via luminescent and scanning laser thermal microscopy

10:25 – 10:50 **Yoshinori Uzawa** 4
Performance of terahertz superconducting receivers for the ALMA telescope

Coffee break 10:50 – 11:10

Session: Nanostructure/Josephson 11:10 – 12:25 (Chair: Shiro Kawabata)

11:10 – 11:35 **Taro Yamashita** 5
Recent progress of superconducting nanowire single-photon detector and its applications

11:35 – 12:00 **Shuichi Ooi** 6
Detection of vortex state in mesoscopic intrinsic Josephson junctions stacks

17:50 – 18:15 **Chih-Wei Luo** 17
THz emission and detection on surface carriers in topological insulators

18:15 – 18:30 **Gaku Eguchi** 18
Ideal surface Dirac cone and its transport properties in the topological insulator $TlBiSe_2$

Light meal 18:30 – 19:00

Session: Josephson junctions 19:00 – 20:30 (Chair: Vladimir Krasnov)

19:00 – 19:25 **Paul Seidel** 19
Modeling different kinds of Josephson junctions and circuits for interpretation of their electrical characteristics

19:25 – 19:50 **Yury Shukrinov** 20
Effects of coupling in intrinsic Josephson junctions under external electromagnetic radiation

19:50 – 20:15 **Edward Goldobin** 21
Experiments with ferromagnetic φ Josephson junctions

20:15 – 20:30 **Mohammad Kolahchi** 22
Resonance overlap as the origin of structured chaos in Josephson junctions

Tuesday, December 2

Session: THz emission III 9:00 – 10:40 (Chair: Kazuo Kadowaki)

Coffee break 10:40 – 11:10

Session: Intrinsic Josephson junction I 11:00 – 12:35 (Chair: Reinhold Kleiner)

Excursion 13:00 – 18:00

Poser session 18:30 – 20:30

Wednesday, December 3

Session: Metamaterials 9:00 – 10:30 (Chair: Steven Anlage)

Coffee break 10:30 – 10:50

Session: Nanostructure/detector 10:50 – 12:20 (Chair: Paul Seidel)

Lunch 12:20 – 14:00

Session: Intrinsic Josephson junction II 14:00 – 15:35 (Chair: Hu-Jong Lee)

Tea break 15:35 – 15:55

Session: THz emission IV 15:55 – 17:30 (Chair: Ulrich Welp)

Closing 17:30 – 17:40