Session Program

14–16 Jan 2026

BREAD Collaboration Workshop

TeraBREAD and THz Sensing

Harvard University

Thursday 15 January

09:55

TeraBREAD and THz Sensing

Session | **Location:** Harvard University | **Convener:** Stefan Knirck

09:55–10:20 **Transition Edge Sensors**

Speaker
Dr Rita Sonka

10:20–10:40 **Coffee**

10:40–11:05 **Dark Photon Search with KIDs**

Speaker
Dr Ritoban Basu Thakur

11:05–11:30
Cold-Electron Bolometers for broadband sub-cm wave single photon counting (~60GHz)

Speaker
Prof. Karthik Ramanathan

11:30–11:55 **Josephson Photonics Devices for BREAD**

Speakers
Prof. Max Hofheinz, Dr Nicolas Bourlet

11:55–12:05 **Discussion**

12:10

14:10

TeraBREAD and THz Sensing

Session | **Location:** Harvard University | **Convener:** Morgan Lynn

14:10–14:35 **SQuAT (Superconducting Quasiparticle-Amplifying Transmons)**

Speaker
Dr Alexander Droster

14:35–14:55
WIXARD (WIdeband graphene-based aXion dARk matter quantum Detector) for BREAD and MADMAX

Speaker
Prof. Kin Chung Fong

14:55–15:15 **Designing a Graphene Microwave single photon detector**

Speaker
Prof. Ethan Arnault

15:15–15:25 **Coffee**

15:25–15:50
Single Electrons in a Penning Trap as a meV Single Photon Counter for BREAD

Speaker
Prof. Xing Fan

15:50–16:15 **Axion Dark Matter Detection with Axion Quasiparticles**

Speaker
Prof. Suyang Xu

16:15–16:30 **Discussion**

16:30

Friday 16 January

11:00

TeraBREAD and THz Sensing: Beyond Sensing

Session | **Location:** Harvard University | **Convener:** Stefan Knirck

11:00–11:20 **Photomixer R&D**

Speaker
Dr Emily Perry

11:40–12:05 **Fourier Transform Spectrometer Options**

Speaker
Dr Ritoban Basu Thakur

12:05–12:25 **Discussion - Options for Frequency Resolution in BREAD**

12:25