

Session Title:	[Tu1C] Quantum Sensing I
Session Date:	August 6 (Tue.), 2024
Session Time:	11:00-12:30
Session Room:	Room C (107-109)
Session Chair(s)	Prof. Li You (Tsinghua Univ., China)

[Tu1C-1] [Invited]	11:00-11:30
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Quantum Interferometry for Sensing

Gerd Leuchs (Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany)

[Tu1C-2]	11:30-11:45
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Distributed Multiple-phase Estimation with Fewer Photons

Dong-Hyun Kim (KIST, Korea), Seongjin Hong (Chung-Ang Univ., Korea), Yong-Su Kim (KIST, Korea), Yosep Kim (Korea Univ., Korea), Seung-Woo Lee (KIST, Korea), Raphael C. Pooser (QC82, USA), Kyunghwan Oh (Yonsei Univ., Korea), Su-Yong Lee (Agency for Defense Development, Korea), Changhyoup Lee (KRISS, Korea), and Hyang-Tag Lim (KIST, Korea)

[Tu1C-3]	11:45-12:00
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Heisenberg-limited Metrology via Weak-value Amplification Without Using Entangled Resources

Yosep Kim, Seung-Yeun Yoo, and Yoon-Ho Kim (POSTECH, Korea)

[Tu1C-4]	12:00-12:15
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Detecting Submicron-Scale Continuous Variation in Phase of AC Magnetic Field around Micro-Circuit with Diamond Quantum Sensor

Fuki Otsubo, Takumi Mikawa (Keio Univ., Japan), Yuichiro Matsuzaki (Chuo Univ., Japan), Norio Tokuda (Kanazawa Univ., Japan), Norikazu Mizuochi (Kyoto Univ., Japan), and Junko Ishi-Hayase (Keio Univ., Japan)

[Tu1C-5]	12:15-12:30
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Mid-infrared Sensing using an Antiresonant Hollow Core Fiber in a Quantum Interferometer

Thomas Produit, Tanmoy Chakraborty, Leonid Krivitsky (A*STAR, Singapore), Ang Deng, Wonkeun Chang (Nanyang Tech. Univ., Singapore), and Anna V. Paterova (A*STAR, Singapore)