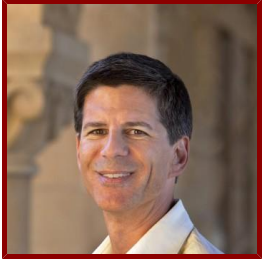


Stanford



Joseph Kahn

Harald Trap Friis Professor
Electrical Engineering

Bio

BIO

Joseph M. Kahn is a Professor of Electrical Engineering at Stanford University. His research addresses communication and imaging through optical fibers, including modulation, detection, signal processing and spatial multiplexing. He received A.B. and Ph.D. degrees in Physics from U.C. Berkeley in 1981 and 1986. From 1987-1990, he was at AT&T Bell Laboratories, Crawford Hill Laboratory, in Holmdel, NJ. He was on the Electrical Engineering faculty at U.C. Berkeley from 1990-2003. In 2000, he co-founded StrataLight Communications, which was acquired by Opnext, Inc. in 2009. He received the National Science Foundation Presidential Young Investigator Award in 1991 and is a Life Fellow of the IEEE.

ACADEMIC APPOINTMENTS

- Professor, Electrical Engineering
- Member, Bio-X

ADMINISTRATIVE APPOINTMENTS

- Chair, Academic Affairs Committee, Department of Electrical Engineering, (2012-2022)

HONORS AND AWARDS

- Chair's Award for Outstanding Contributions to Undergraduate Education, Department of Electrical Engineering, Stanford University (2020)
- Teaching Honor Roll, Tau Beta Pi Society, Stanford University (2017-2018)
- Hoover Faculty Scholar, Stanford University (2003-2005)
- Fellow, IEEE (2000-present)
- Presidential Young Investigator, National Science Foundation (1991-1996)

PROGRAM AFFILIATIONS

- Stanford SystemX Alliance

PROFESSIONAL EDUCATION

- PhD, University of California, Berkeley , Physics (1986)
- MS, University of California, Berkeley , Physics (1983)
- BA, University of California, Berkeley , Physics (1981)

LINKS

- Profile at EE Department: <http://ee.stanford.edu/~jmk>
- Curriculum Vitae: <http://ee.stanford.edu/~jmk/biographical/Joseph.M.Kahn.resume.pdf>

- Google Scholar Profile: <http://scholar.google.com/citations?user=D22GptUAAAAJ&hl=en>

Teaching

COURSES

2025-26

- Advanced Optical Fiber Communications: EE 348 (Aut)
- Signals and Systems I: EE 102A (Win)

2024-25

- Digital Communication: EE 379 (Win)
- Introduction to Optical Fiber Communications: EE 247 (Aut)
- Signals and Systems I: EE 102A (Win)

2023-24

- Advanced Optical Fiber Communications: EE 348 (Aut)
- Signals and Systems I: EE 102A (Win)

2022-23

- Digital Communication: EE 379 (Win)
- Introduction to Optical Fiber Communications: EE 247 (Aut)
- Signal Processing and Linear Systems I: EE 102A (Win)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Aivar Abrashuly, Nancy Ammar, Geneva Ecola, Hongxiang Jia, Jida Zhang

Doctoral Dissertation Advisor (AC)

Thomas Horton King, Rebecca Refaee

Master's Program Advisor

Xiangren Chen, Shannon Fan, Erika Hunting, Edward Kim, Sameeh Maayah, Peter Mugaba Noertoft, Spencer Wallace, Tracy Zhao

Doctoral (Program)

Mohammed Azzouz, Hongxiang Jia, Rebecca Refaee, Louise Schul

Publications

PUBLICATIONS

- **Low-Loss All-Fiber Mode Permuter Design Exploiting Propagation Constant Engineering and Cascaded Long-Period Fiber Gratings** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
Krutko, O., Refaee, R., Vijay, A., Zahedi, N., Kahn, J. M.
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- **Ultra-Low-Loss Fiber Bragg Grating Mode Scrambler Design Exploiting Propagation Constant Engineering** *JOURNAL OF LIGHTWAVE TECHNOLOGY*
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Liang, E. M., Kahn, J. M.
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Vijay, A., Krutko, O., Refaee, R., Kahn, J. M.
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- **Statistics of Mode Scrambling in Long-Haul Multi-Mode Fiber Systems**
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- **Impact and Mitigation of Polarization- or Mode-Dependent Gain in Ultra-Long-Haul Systems**
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SPIE-INT SOC OPTICAL ENGINEERING.2018
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