

# 해동 해외석학 초청강연

일자\_ 2025년 6월 20일(금) 11:10~12:10

장소\_ 제주 신화월드 랜딩 컨벤션 센터 LG층 랜딩볼룸 A

후원\_ **해동과학문화재단**  
haedong science foundation

## 강연 소개



### Tapping into the Full Potential of the Stratosphere

**Dr. Mohamed-Slim Alouini**

*Distinguished Professor of ECE*

*KAUST, Thuwal, Makkah Province, Saudi Arabia*

Mohamed-Slim Alouini, was born in Tunis, Tunisia. He earned his Ph.D. from the California Institute of Technology (Caltech) in 1998 before serving as a faculty member at the University of Minnesota and later at Texas A&M University at Qatar. In 2009, he became a founding faculty member at King Abdullah University of Science and Technology (KAUST), where he currently is the Al-Khawarizmi Distinguished Professor of Electrical and Computer Engineering and the holder of the UNESCO Chair on Education to Connect the Unconnected. Dr. Alouini is a Fellow of the IEEE, OPTICA, and SPIE, and his research interests encompass a wide array of research topics in wireless and satellite communications. He is currently particularly focusing on addressing the technical challenges associated with information and communication technologies (ICT) in underserved regions and is committed to bridging the digital divide by tackling issues related to the uneven distribution, access to, and utilization of ICT in rural, low-income, disaster-prone, and hard-to-reach areas.

High-Altitude Platform Stations (HAPS) are emerging as a key complement to LEO satellite mega-constellations, offering a scalable solution for global connectivity and bridging digital divides where terrestrial and satellite networks fall short. Operating from the stratosphere, HAPS leverage advanced beamforming and free-space optics (FSO) to deliver high-capacity and low-latency communications across diverse geographical areas. This talk explores the technological connectivity advancements driving HAPS by highlighting how intelligent beam management and optical feeder and inter-HAPS links can democratize broadband access and provide also unique solutions for disaster recovery, paving the way for a more connected world.