

Workshop Speaker	
Full Name	Tianwai Bo
Affiliation	KAIST
Presentation Title	Kramers-Kronig detection for metro optical transmission
Biography	
<p>Tianwai Bo received the B.Eng. degree from Jilin University, China, in 2012 and Ph. D. degree in optical communication from The Chinese University of Hong Kong, Hong Kong, in 2016. He is currently working as a postdoctoral fellow in KAIST, Korea. His current research interests include short- and metro-haul optical transmission, advanced digital signal processing techniques and optical performance monitoring.</p>	
200 words abstract	
<p>The Kramers-Kronig (KK) receiver has attracted considerable interest due to its capability to retrieve the phase information from the directly detected intensity information. This receiver allows us not only to detect the optical single-sideband signal without suffering from the signal-signal beat interference but also to compensate for the waveform distortions induced by linear transmission impairments through digital signal processing (DSP) at the receiver. These make the KK receiver particularly suitable for metro applications, where the demands for data traffic keep soaring but the pressure for lower cost per bit is strong. In this talk, we review the current progress of Kramers-Kronig detection for metro transmission systems. The focus will be placed on the practical implementation of this receiver and feasible methods to reduce its complexity, in comparison with the coherent detection.</p>	