

Session Title	Novel Algorithm for Optical Network	Session Code	6A1
Date and Time	July 6 (Fri.) / 08:30-10:00 (90')		
Place	Room A		
Session Chair	Jian Chen (NUPT)		

## 6A1-1 (Invited)

08:30-09:00 (30')

### Optical Monitoring based on Convolutional Neural Networks

T. Tanimura, T. Kato, S. Watanabe, and T. Hoshida  
Fujitsu Laboratories Ltd., Japan

## 6A1-2

09:00-09:15 (15')

### Multi-Granular Optical Path Computations based on Physical Network Topology Descriptions

Kiyo Ishii<sup>1</sup>, Atsuko Takefusa<sup>2</sup>, Shu Namiki<sup>1</sup>, and Tomohiro Kudoh<sup>1,3</sup>  
<sup>1</sup>AIST, Japan, <sup>2</sup>Nat'l Inst. of Informatics, Japan, <sup>3</sup>The Univ. of Tokyo, Japan

## 6A1-3

09:15-09:30 (15')

### Machine Learning with Service Classification for Detecting Control Plane Intrusions in Software Defined Optical Networks

Fei Wang<sup>1</sup>, YongLi Zhao<sup>1</sup>, Wei Wang<sup>1</sup>, Dongmei Liu<sup>2</sup>, Jun Liu<sup>2</sup>, Shulin Zhang<sup>2</sup>, Zhengyang Ding<sup>3</sup>, Shen Jin<sup>4</sup>, and Jie Zhang<sup>1</sup>  
<sup>1</sup>Beijing Univ. of Posts and Telecommunications, China, <sup>2</sup>State Grid Information & Telecommunication Company Ltd., China, <sup>3</sup>State Grid Jiangsu Information & Telecommunication Company Ltd., China, <sup>4</sup>State Grid Jibei Information & Telecommunication Company Ltd.

## 6A1-4

09:30-09:45 (15')

### Alarm Compression based on Machine Learning and Association Rules Mining in Optical Networks

Liqi Lou<sup>1</sup>, Min Zhang<sup>1</sup>, Danshi Wang<sup>1</sup>, Jin Li<sup>1</sup>, Xiongyan Tang<sup>2</sup>, and Lin Ai<sup>1</sup>  
<sup>1</sup>Beijing Univ. of Posts and Telecommunications, China, <sup>2</sup>China Unicom research Inst. Beijing, China

## 6A1-5

09:45-10:00 (15')

### Assessment of Optical Cross-Connect Architectures for the Creation of Next Generation Optical Networks

Mungun-Erdene Ganbold, Takuma Yasuda, Yojiro Mori, Hiroshi Hasegawa, and Ken-ichi Sato  
Nagoya Univ., Japan