



## 学术报告会 Seminar

题目	Introduction to the DESY test beam infrastructure and its new improvements	
报告人	<b>Mengqing Wu</b> Dr. junior scientist	
时间	2018年5月25日(星期五) 下午 13:00-14:00	
地点	上海科技大学, 信息学院 1号楼 C 区 502 会议室 (上海雾计算实验室)	

**Abstract:** DESY is one of the world's leading accelerator centres and a member of the Helmholtz Association. DESY test beam facility operates three beam lines providing electron/positron with energies from 1 to 6 GeV. Two of the three beam lines are equipped with an EUDET-type telescope based on the fine pitch Mimosas26 pixel sensor, requiring by ~70% users. According to the test beam user community, a task to improve the DESY test beam infrastructure is assigned within the EU Horizon2020 AIDA-2020 project, including building up a new silicon telescope at the third beam line to address the need of momentum measurements inside a 1T superconducting solenoid magnet, and an environmental slow control system to cover all the beam area. The new telescope is based on a 25 $\mu$ m pitch strip sensor of 10 $\times$ 10cm<sup>2</sup>, readout by two 1024-channel bumpbonded ASICs, and it is designed to provide a resolution better than 10 $\mu$ m in the bending direction, and a resolution better than 1mm along the magnet field. This talk will give a brief introduction of the current DESY test beam infrastructure, with a focus on the R&D of the new telescope and the slow control system, and naturally a summary with perspectives will be given at the end.

**Bio:**

Currently working in FLC group, DESY as a Scientist (Postdoc)

- Play a central role in the design, construction and installation of a silicon reference tracker within the AIDA2020 project at the test beam facility,
- in charge of the commissioning of the read-out system and the installation of a monitoring system within the test beam DAQ.

- 2012-2015 Ph.D. in Particle Physics - Université Joseph Fourier, France Graduated - July 30th, 2015

Supervisors - Dr. Marie-Hélène GENEST and Dr. Faïrouz MALEK Thesis - Search for Supersymmetry and Dark Matter particles in the single photon final state with the ATLAS detector, CERN-THESIS-2015-122

<http://SHIFT.shanghaitech.edu.cn>



**Contact:** 张武雄, 博士, wuxiong.zhang@wico.sh, 18516288990

**地图:** 上海科技大学-上海雾计算实验室

**Map:** Shanghai Institute of Fog Computing Technology (SHIFT) @ ShanghaiTech



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