

Time resolution for NDL LGAD sensor

Yuzhen Yang

on behalf of IHEP ATLAS group

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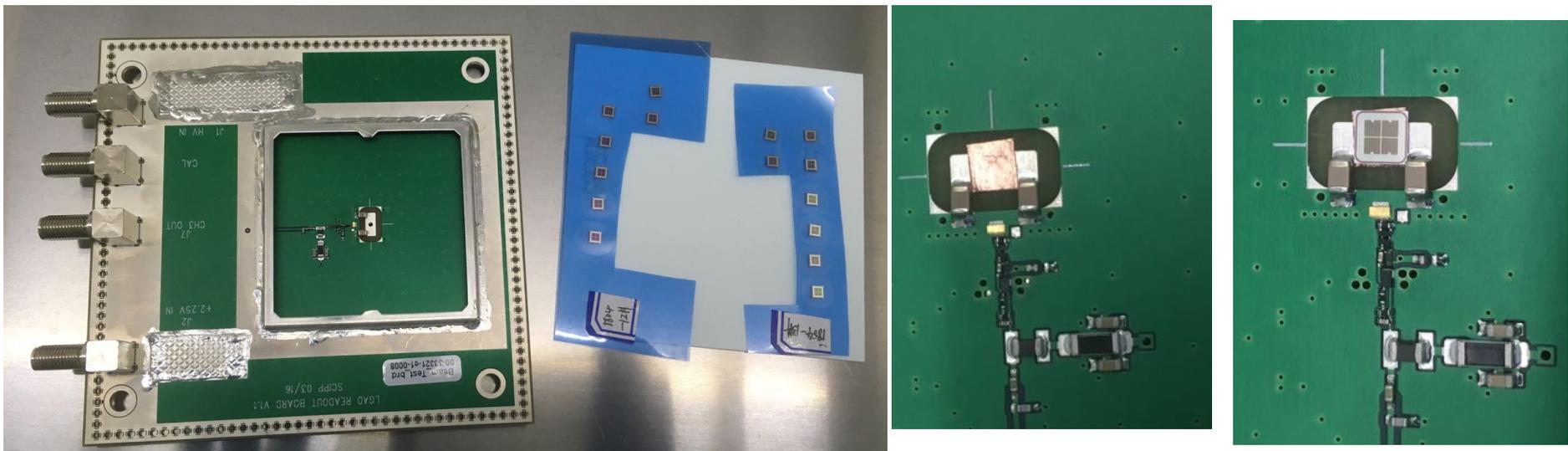
Introduction

- ❖ Assembly
- ❖ Wire bonding
- ❖ Time resolution test system setup
- ❖ Preliminary result

NDL LGAD sensor	Test Board
BV60	Beam_test_brd-0001
BV170	Beam_test_brd-0008

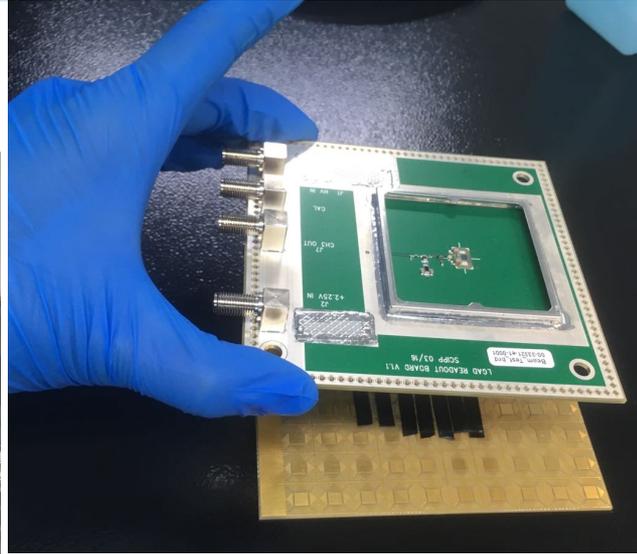
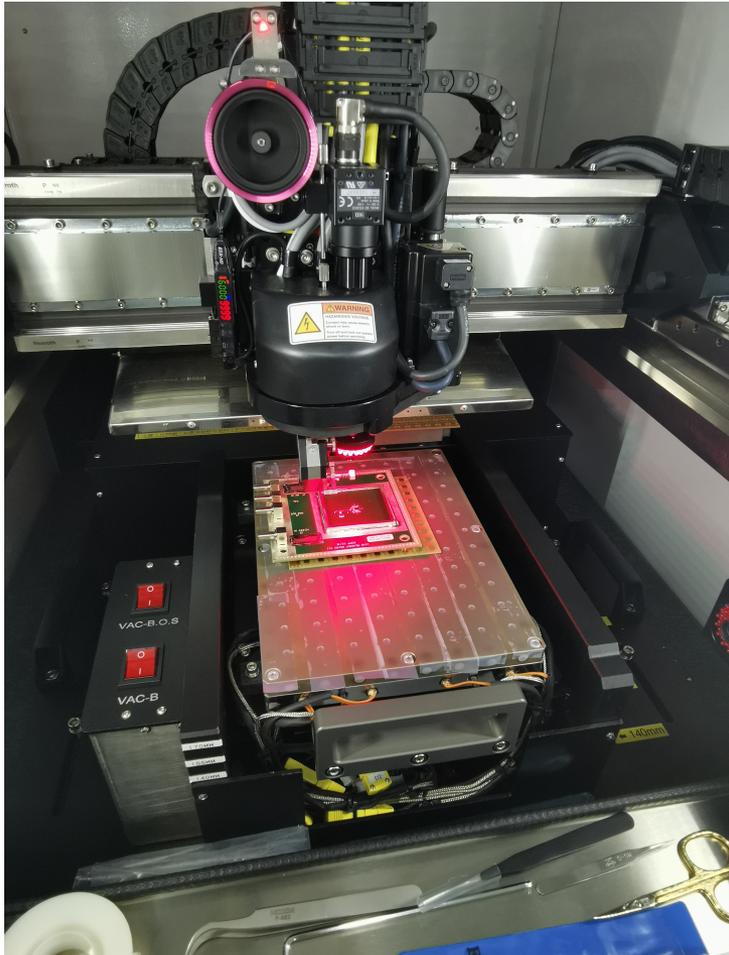
Assembly LGAD onto Test Board

Zhijun, Yuzhen

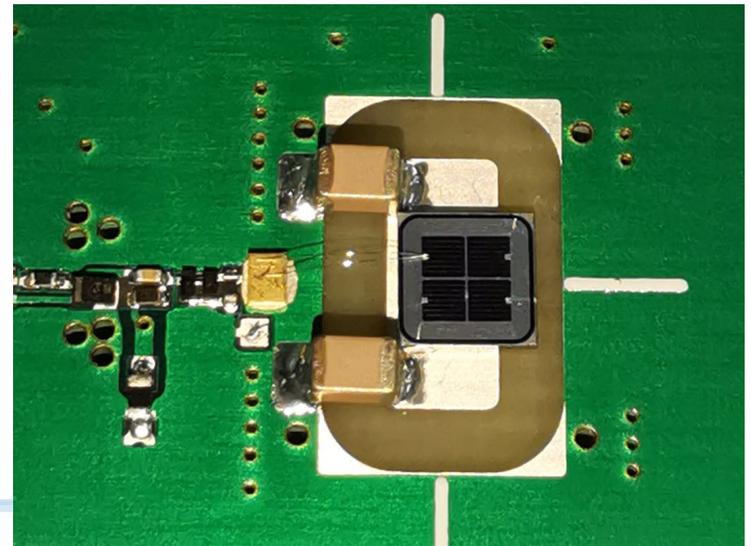


Conductive, double sides adhesive tape

Assembly and Wire bonding

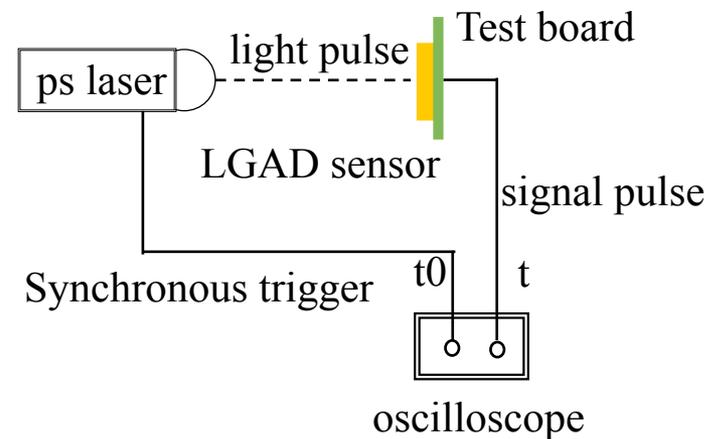
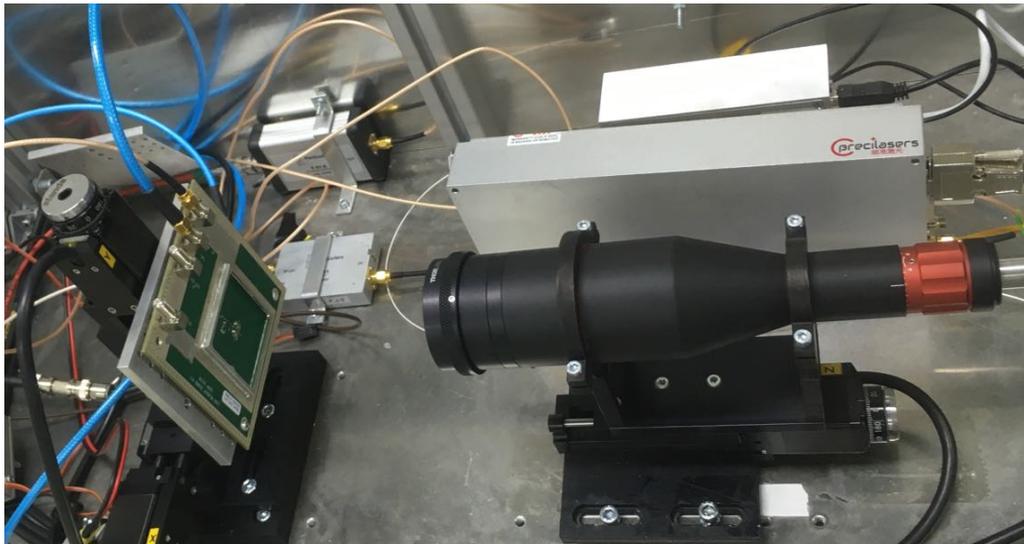


Yuzhen, Zhijun

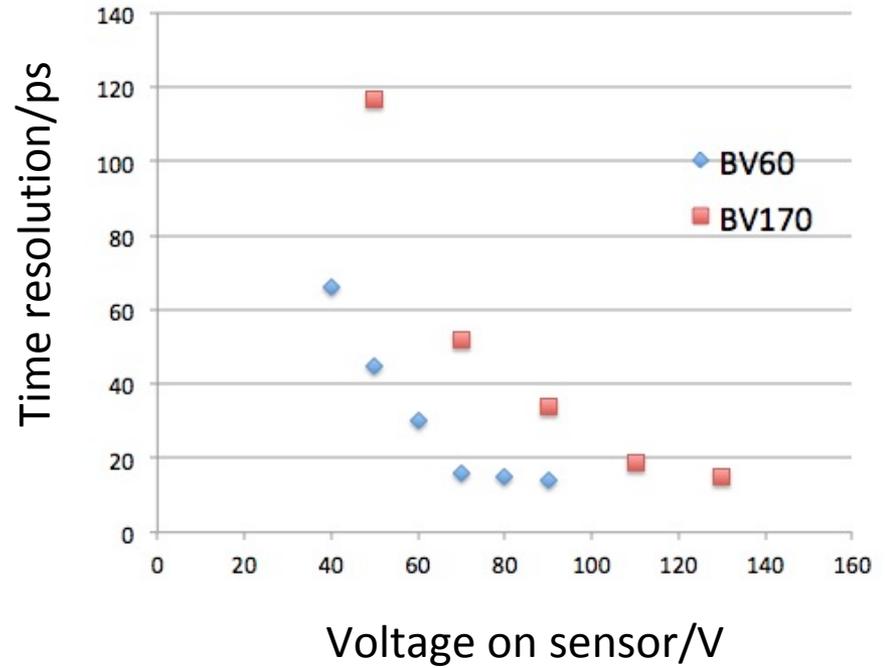
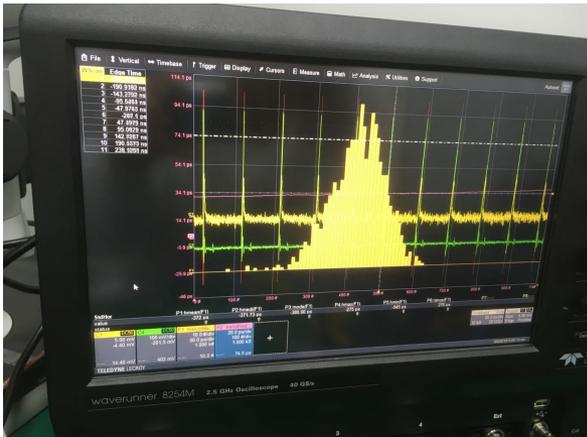


Time resolution test system

- Pico second laser: 1064nm wave length, 7.5 ps pulse width, 20.97MHz frequency
- Oscilloscope: Lecroy 8254M, 2.5 GHz bandwidth, 40GS/s sample rate
- High voltage power supply: Keithley 2410
- Low voltage power supply: 1.4V for amplify



Preliminary result



Suyu is doing the data analysis on the way...

Thank you for your help and attention.