



# Test results of BM@N Si-detectors

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5<sup>th</sup> Collaboration meeting of the BM@N Experiment

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### Forward Silicon Tracker of BM@N





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#### Silicon detector module



Senor size:  $63 \times 63 \times 0.3 \text{ mm}^3$ Topology: double sided microstrip (DSSD) (DC- coupling) Pitch p<sup>+</sup> strips 95 µm Pitch n<sup>+</sup> strips 103 µm Number of strips: 640 (p<sup>+</sup>) × 614 (n<sup>+</sup>) Stereo angel between p<sup>+</sup>/n<sup>+</sup> strips: 2,5°



#### Silicon detector module

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# Forward Silicon Tracker

#### Topology DSSD 640 $p^+ \times 640 n^+$





## Lasic parameters of DSDD 640×640 for Forward Silicon Tracker

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Summary DSSD's dark current at  $U_{bias} = 100$  V and  $T_{meas} = +23^{\circ}$ C Summary dark current for all DSSD's strips (n<sup>+</sup> - side) Total number of detectors: 106  $T_{meas} = +23^{\circ}$ C, GR1 – Floating

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# Test results of PitchAdapter

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## Basic parameters of Pitch Adapter















# Beam profilometer



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# Express method for measuring DSSD (thickness 175 μm)



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# Conclusions

- Testing silicon detectors and Pitch Adapters characterizes their quality and suitability for using the detector in the further process of creating a coordinate plane;
- Measuring technology allows you to obtain the necessary data with the least amount of time spent.

# Thanks for your attention!

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