

Charles University Prague (CUNI)

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AIDA AM 2012

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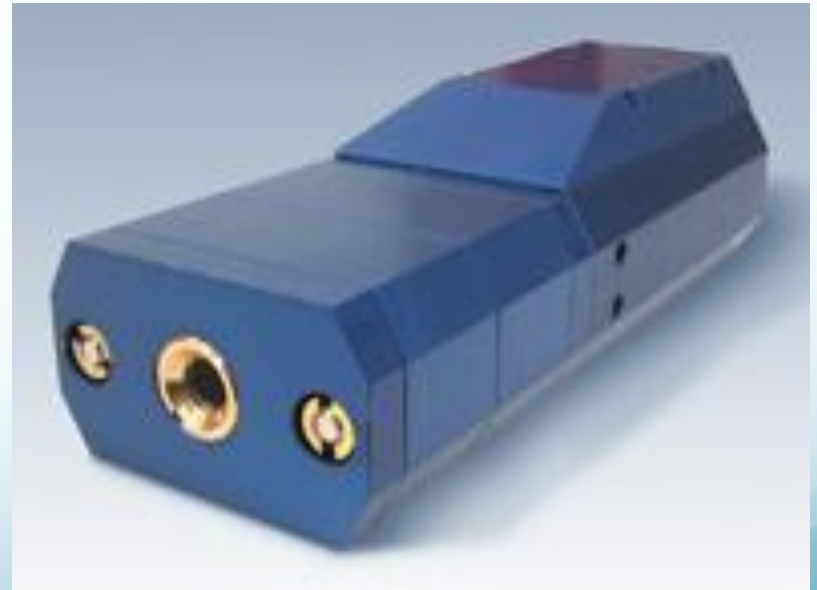
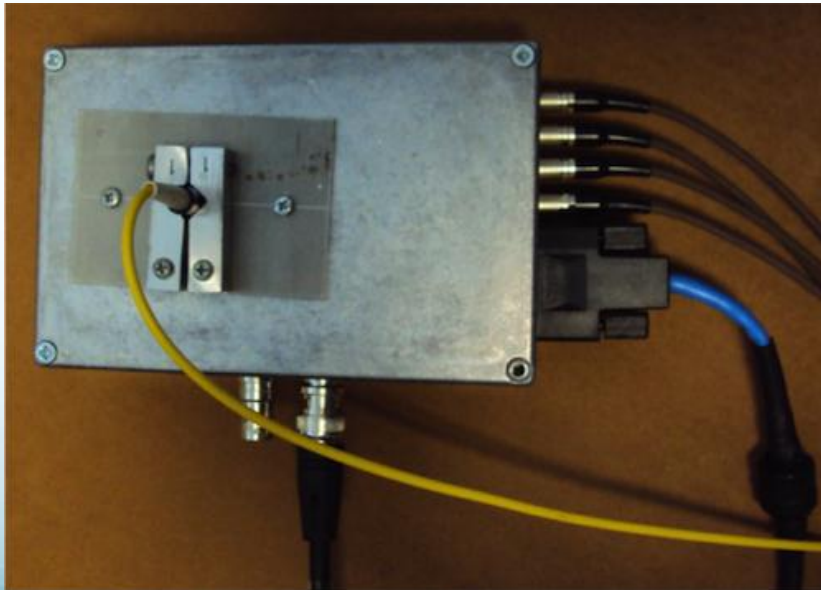
Progress 2011:

1. infrastructure development
 - New laser (LDM658.50.A350 from Omicron)
 - position stages 8MT200-100-XY from Standa
 - new preamplifier designed and manufactured
2. SW strategy considerations

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Progress 2011: infrastructure development

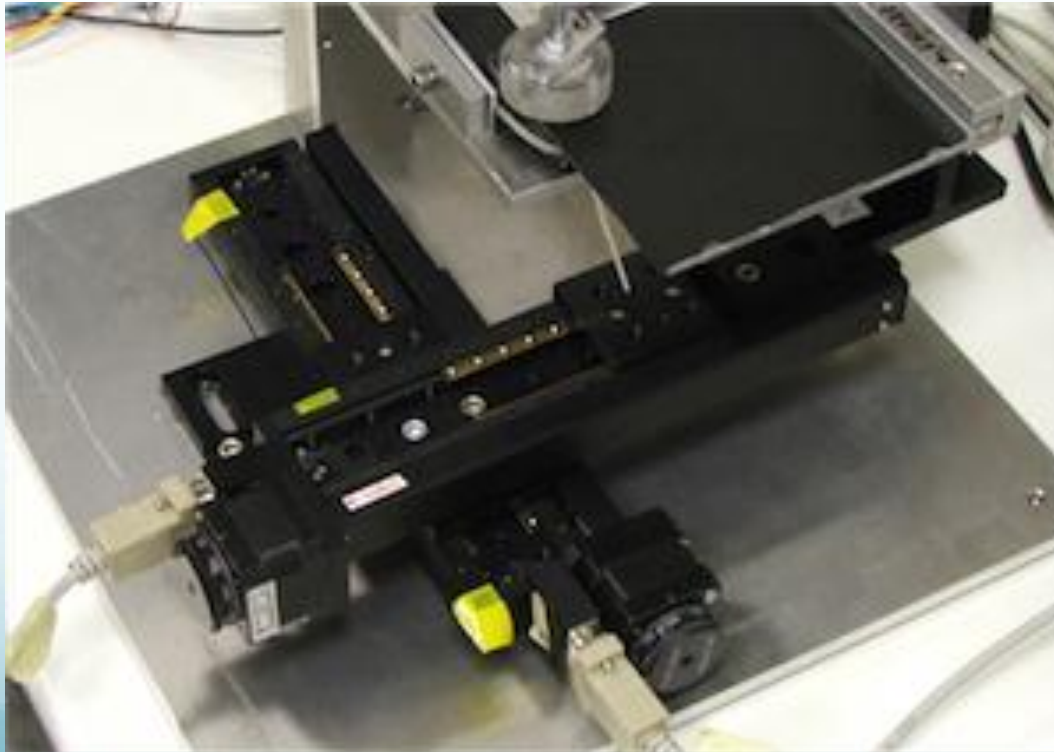
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Progress 2011: infrastructure development

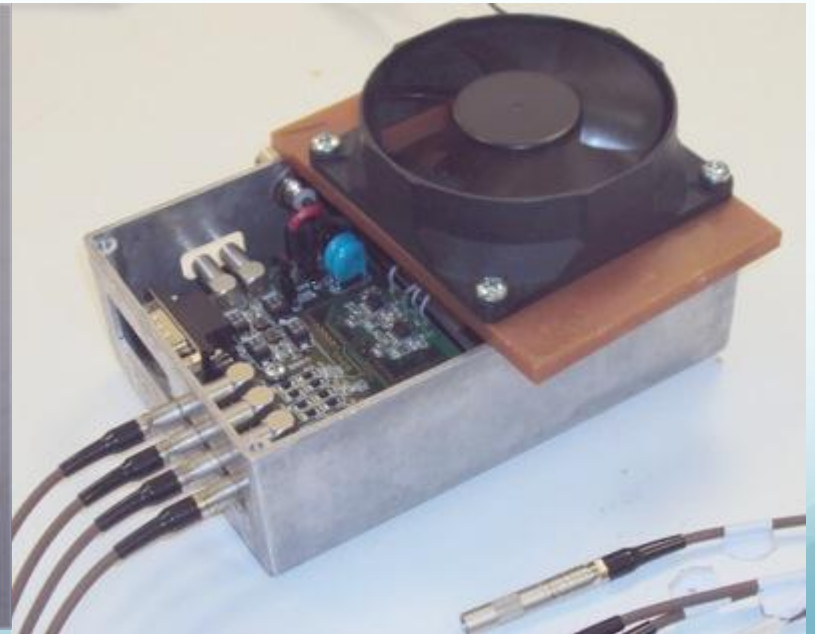
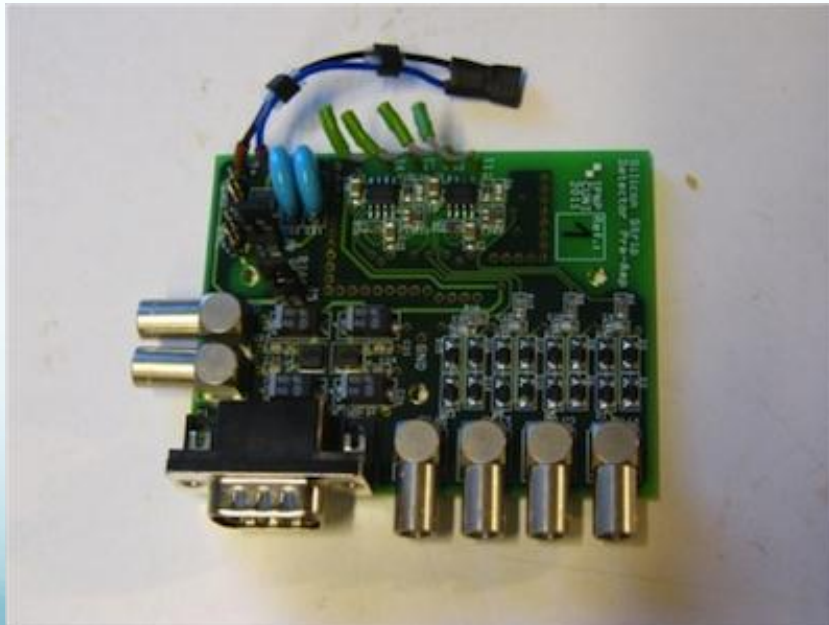
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CUNI: AIDA task: data analysis

- Reconstruction of entry points into a tracking detector using one or two Si strip layers.
- Specification: To-date, very vague. Unknown boundary conditions, unknown users.
Inputs will become more specific as the DAQ and Si design develop.
- Advantage: simple geometry and configuration data.

CUNI: AIDA task: data analysis

Scope:

- Process raw data from the Si DAQ,
- Provide space-points in the format desired by the user
- Provide tracks (impact points and directions) in the format desired by the user
- Provide customizable summary statistics and plots for detector studies, reporting purposes and on-line monitoring.

CUNI: AIDA task: data analysis

Solution: A compact Si reconstruction package.

Small and efficient code

- for easy integration into any software framework or for standalone use
- for on-line monitoring purposes

Flexible interfaces based on user-customizable producer classes

- Customizable to produce ROOT output or LCIO
- Customizable processing modes.

CUNI: AIDA task: data analysis

Solution: A compact Si reconstruction package.

Accompanying suite for specific tasks, separate from the compact analysis kernel:

- simulation and position error estimation
- calibration, gain estimation, eta corrections etc.
- reporting / monitoring summaries and plots.