

ARDENT

Advanced Radiation Dosimetry European Network Training initiative

WP3: Track Detectors

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Advanced Radiation Dosimetry European Network Training initiative

WP3: Track Detectors

Collaboration between

- **AIT** – Austria (Sofia Rollet)
- ESR 5 and 6
- **MIAM** – Italy (Antonio Parravicini)
- ESR 13
- **POLIMI** – Italy (Marco Caresana)
- ESR 15



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WP3: Track Detectors

Objectives:

Development and performance test of measuring techniques based on track detectors (mainly PADC). The main interest is in dosimetry and spectrometry complex radiation fields.

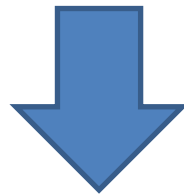
e.g.:

- Neutron dosimetry and spectrometry
- LET spectrometry and dose reconstruction
- Microdosimetry with track detectors?

WP3: Track Detectors

PADC are:

- Fairly tissue equivalent
- Capable to resolve each particle track



- LET spectrometry & microdosimetry?



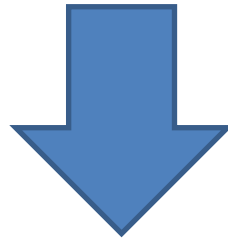
ESR 5



ESR 6

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- Photon insensitive
- Independent on the time structure of the radiation field



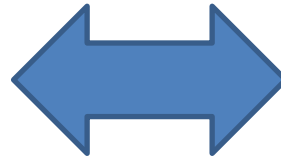
- Possibility to work in pulsed field

Link to ESR 15

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Possible collaborations not foreseen when the proposal was written:

Track detectors



Medipix



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Milestone

- **M12** LET spectrometry with CR39 (POLIMI, MIAM month 30) WP3
- **M13** Instrument intercomparison (All month 30) WP4



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