AGATA@LNL **Mechanics project** by INFN – Padua division

INFN - Legnaro National Laboratories

18th September 2019

Padua division team

















AGATA with NEDA (30 ATCs)





AGATA with NEDA (30 ATCs) 4 m AGATA can: - slide back for target chamber access, at least 80 cm; - rotate around shaft axis of ± 90°.





AGATA with PRISMA (30 ATCs)













Angle: 110°







Angle: 0°





Angle: 110°









MDR cables maximum lenght = 10 m -> from detectors to digitizer racks.





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7 cables for each HPGe crystal;

 \rightarrow 7x3 = 21 cables for each ATC (Agata Triple Cluster);

→ 21x30 = 630 TOTAL CABLES!!!



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- Limitated lenght (10 m);
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7 MDR cables can be gathered together in a Ø 30 mm circle.
So, from now on, we'll represent 7 cables with a Ø 30 mm tube.

There will be 90 of these tubes.









3 or 4 digitizer racks (60x60x220 cm) **close** to AGATA, on a platform moving on a slide. So Agata can slide back and rotate with Prisma.





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To eliminate torsional stress on MDR cables is possible to use a **cable carrier** type «Igus – RBR».

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- To collect your observations....



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Many thanks for your attention

