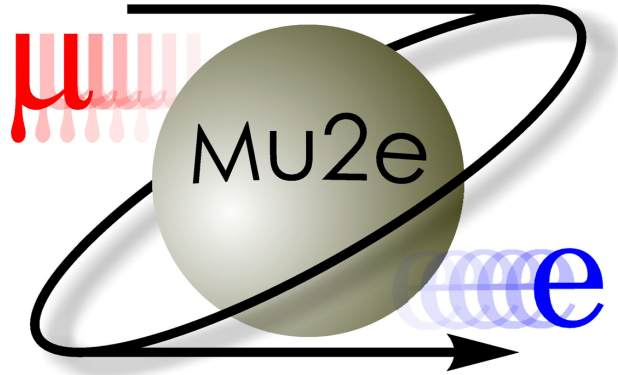


Updates of experimental activity in Mu2e

INFN Ferrara

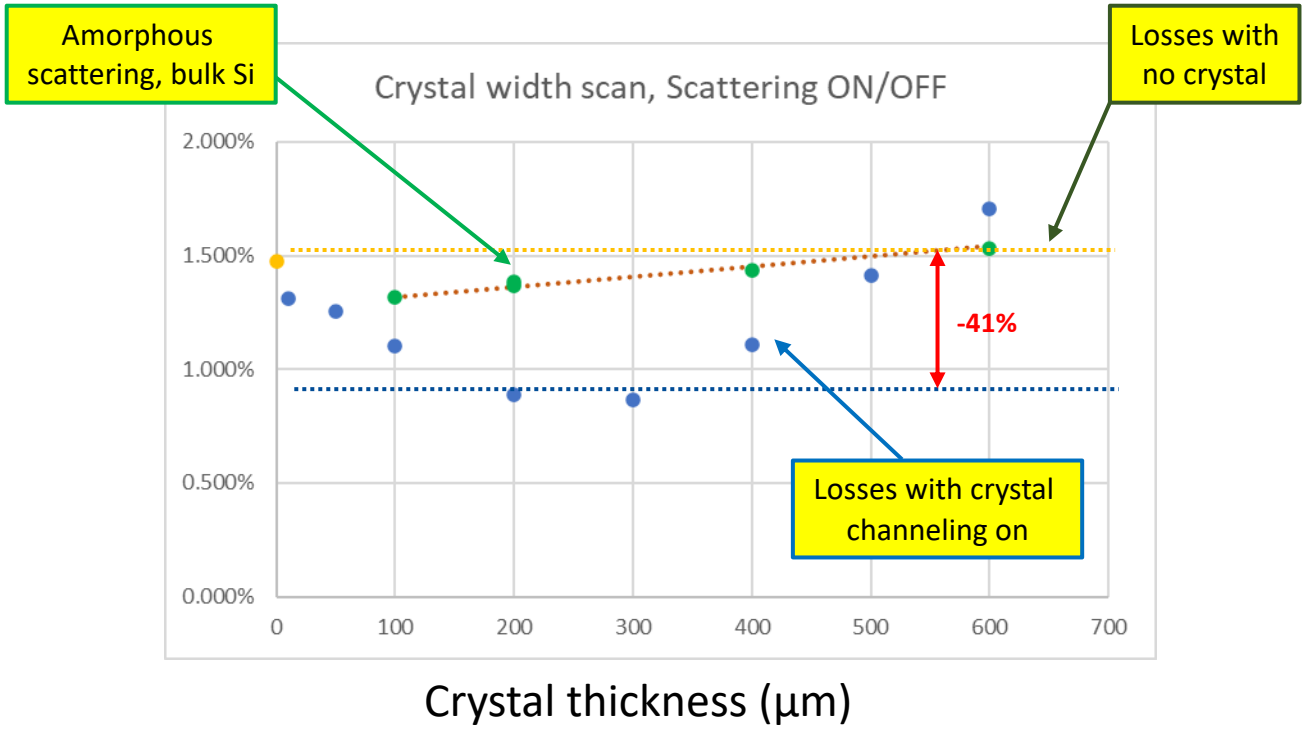
Istituto Nazionale di Fisica Nucleare

Università degli Studi di Ferrara

Activity program by the end of the year

- On October 3rd meeting with V. Nagaslaev (FNAL) for update about crystal simulations

Conservative Beam conditions: beam divergence rms=80 uR



- While simulations by FNAL have not been completely finished yet, some parameters can be set as final such as deflection angle (300 µrad) and the crystal size on the horizontal plane (160 µm if possible).
- This latter is important because it determines the thickness of the wafers from which strip crystals are fabricated. The other sizes can be managed and set once simulation will be accomplished.
- Wafer as thick as 160 µm are non-standard and should be produced by thinning 300 µm wafers, involving a time-taking process.
- We found a producer, which can sell a stock of 25 wafers 160 µm thick, i e ready to use.

- Cost is not negligible, 14.5 k€, and delivery is not fast, 3 months
- In order to speed up the purchase, we found colleagues within INFN Ferrara, which can lend us this amount
- We need to answer very rapidly with some guarantee about the release of the sub-judice by CSN I.

- By the end of the year we plan to finish the sizing of the crystal, to buy needed instrumentation, and to define all the consumables (e g photolithographic masks) for fabrication of the crystal.