

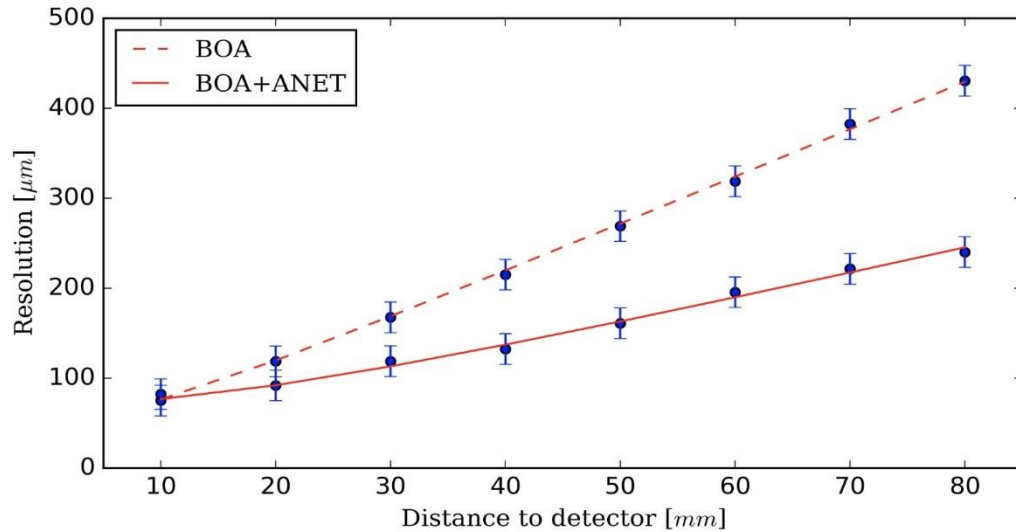
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Development and construction of a **compact multichannel collimator** for neutron imaging

CONCEPT → Compact scalable structure alternating  $B_4C$  and air channels. Dynamic continuous path for a homogeneous irradiation of the sample.

RESULTS → Improvement of the resolution measured at two different neutron imaging beams (BOA @ PSI Swiss, PAVIA LENA reactor Italy). First tomography examples.



Resolution at different distances of the sample from the scintillator at BOA neutron beam with and without the ANET CNC.



Tomography of a Dane iron fibula (circa X century d.C.). Red areas show a higher attenuation w.r.t green areas and are associated with hydrogen-rich mineral phases, which implies an advanced corrosion stage.



ANET Compact Neutron Collimator CNC.