



BECQUEREL
PROJECT

Проект
БЕККЕРЕЛЬ

Beryllium (Boron)

Clustering

Quest in

Relativistic Multifragmentation

<http://becquerel.jinr.ru>

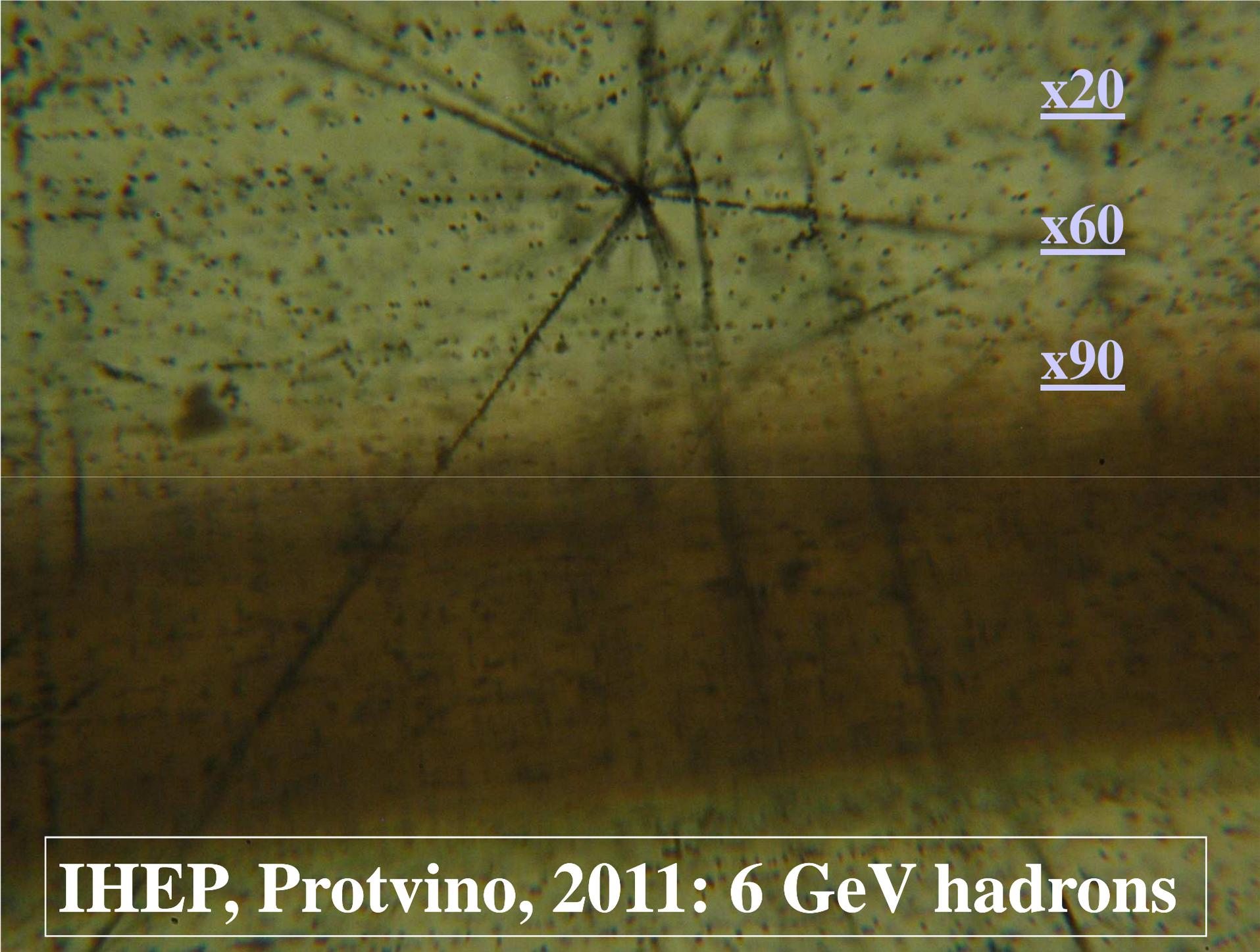
New entries in video collection of exposures of nuclear track emulsion

I. G. Zarubina

The BECQUEREL Collaboration

Veksler and Baldin Laboratory for High Energy Physics

Joint Institute for Nuclear Research

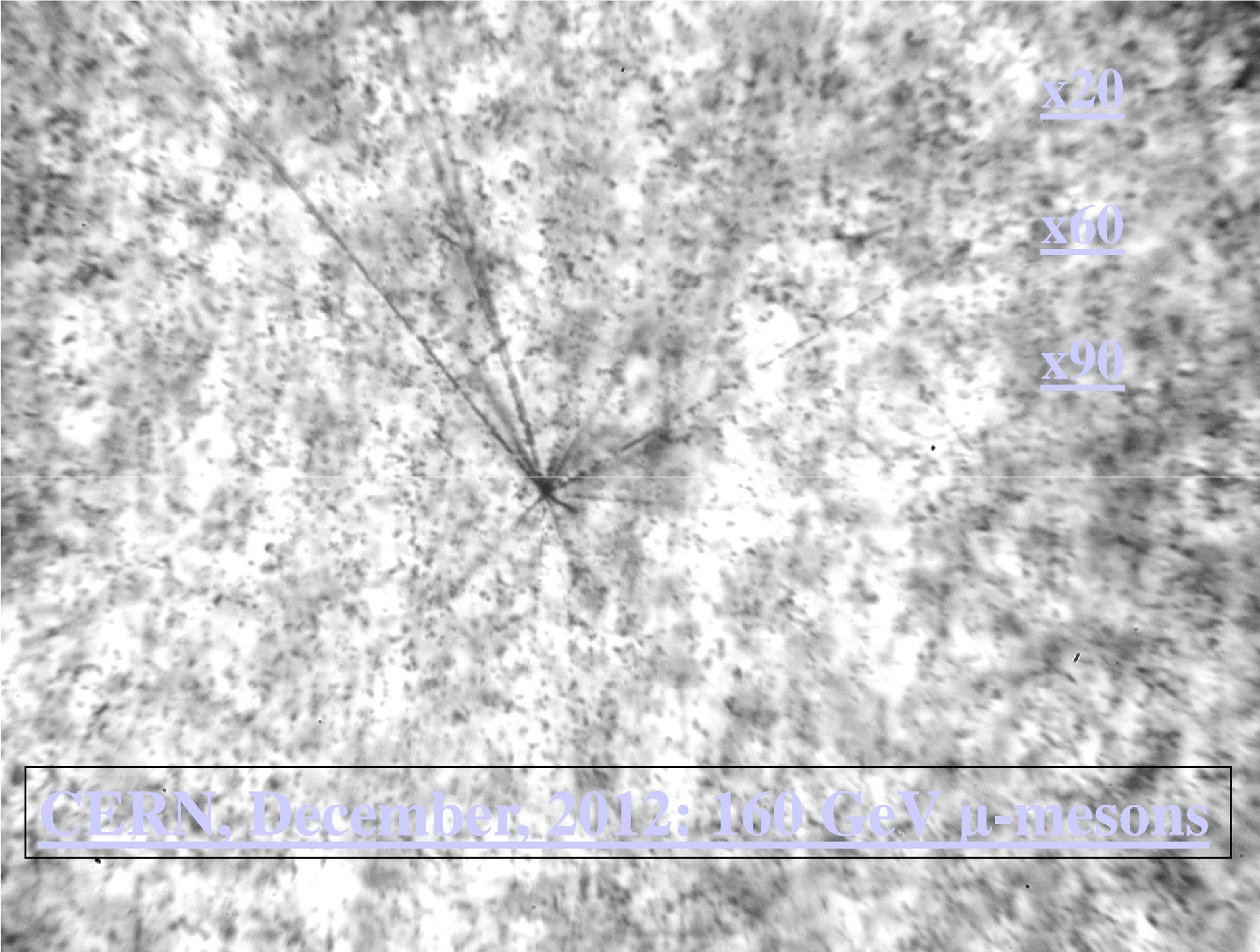


x20

x60

x90

IHEP, Protvino, 2011: 6 GeV hadrons

A black and white micrograph showing a central point from which several dark, linear tracks radiate outwards. The tracks are most prominent in the upper half of the image. The background is a grainy, light-colored material. On the right side, there are three labels: 'x20', 'x60', and 'x90', each underlined, indicating different magnification levels of the tracks.

x20

x60

x90

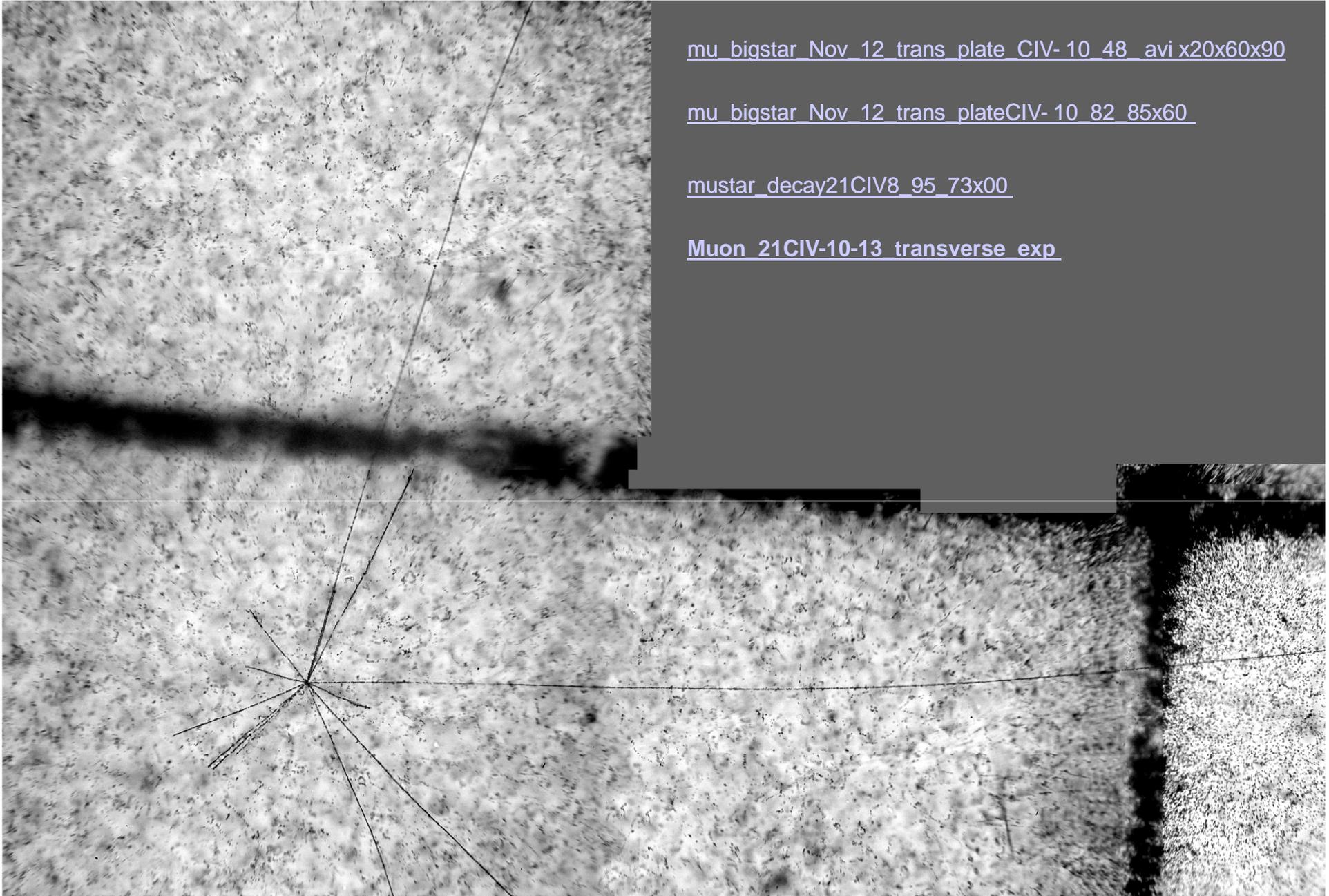
CERN, December, 2012: 160 GeV μ -mesons

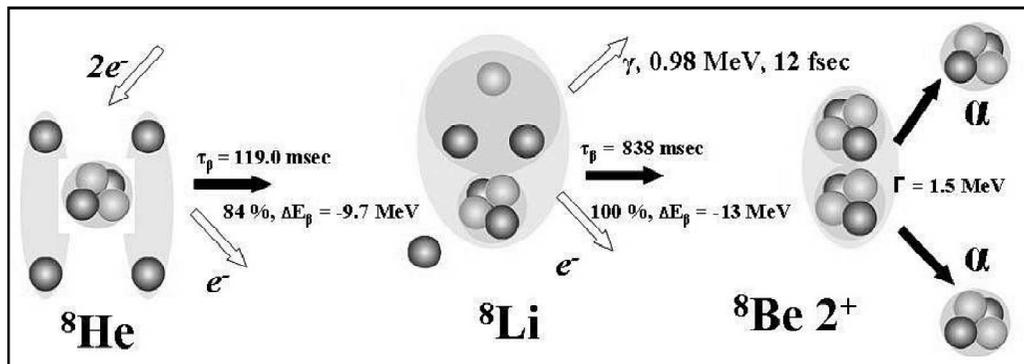
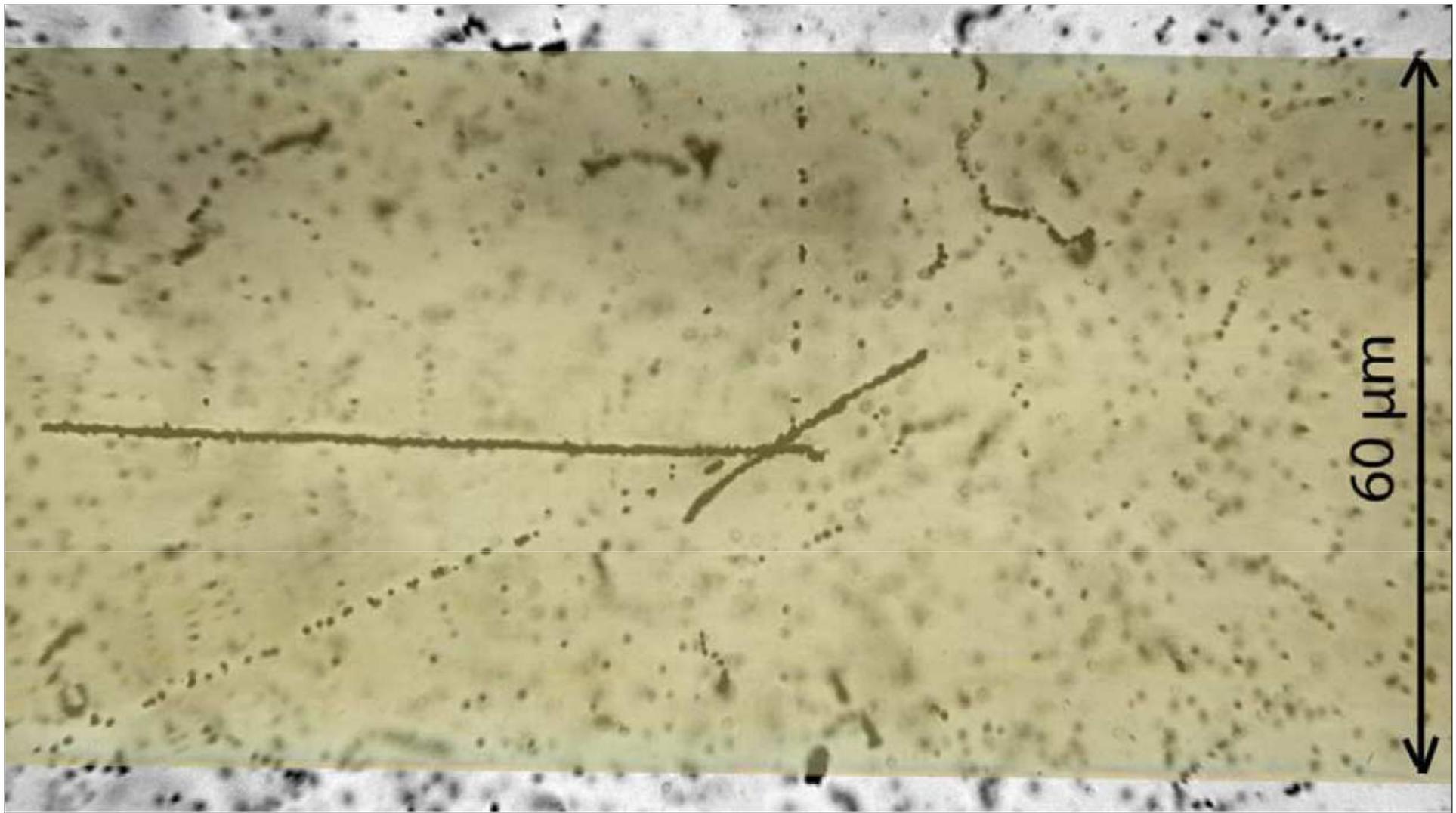
mu bigstar Nov 12 trans plate CIV- 10 48 avi x20x60x90

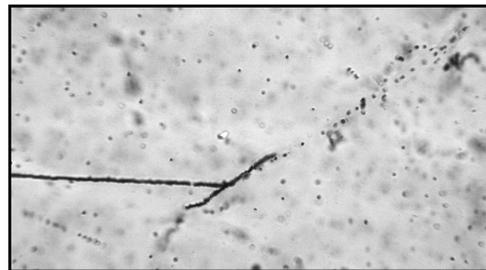
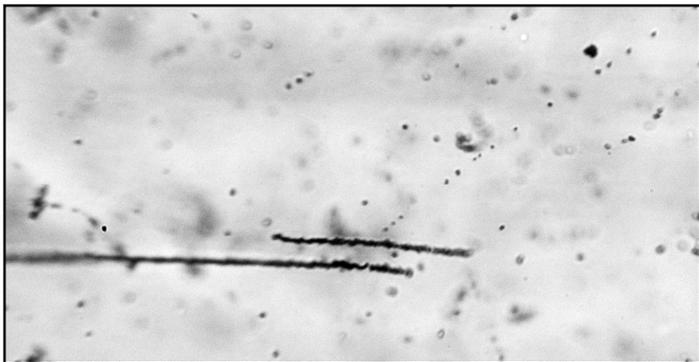
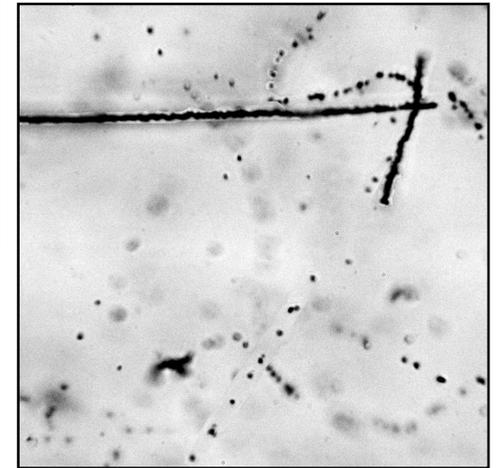
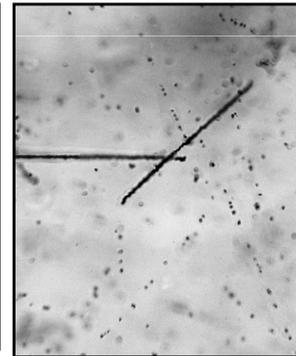
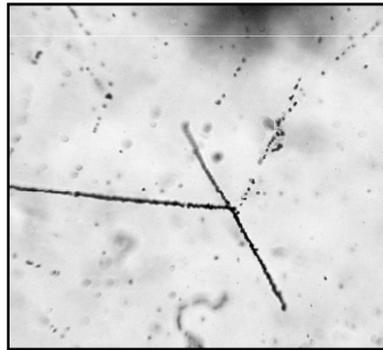
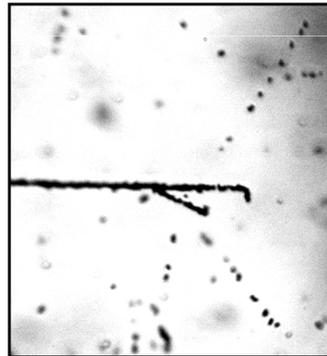
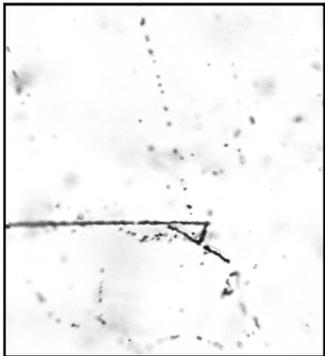
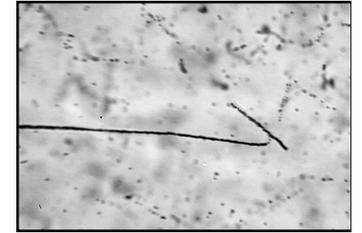
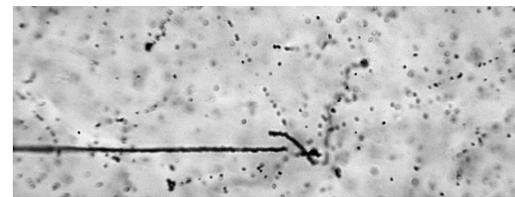
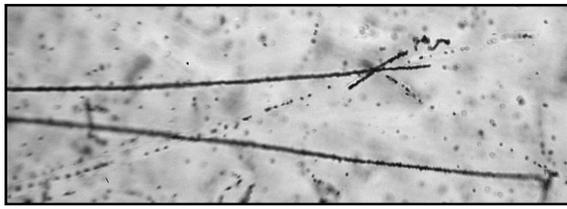
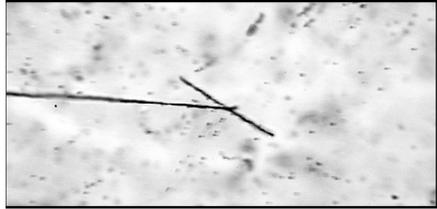
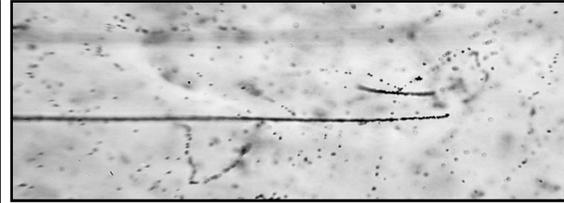
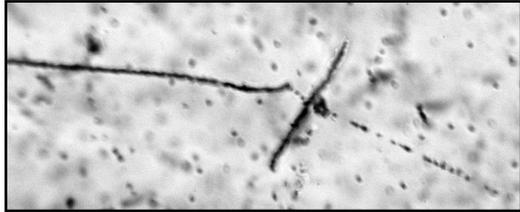
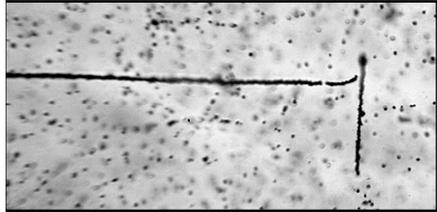
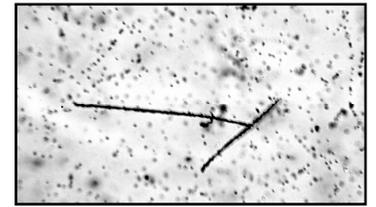
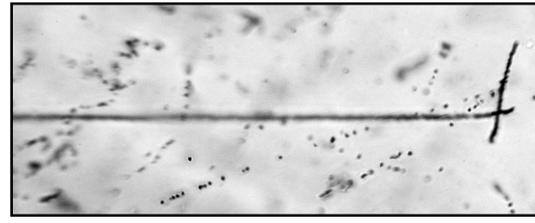
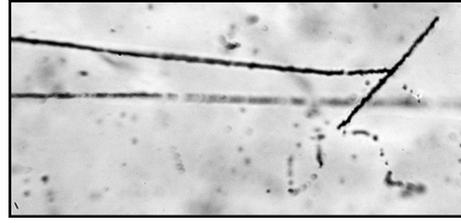
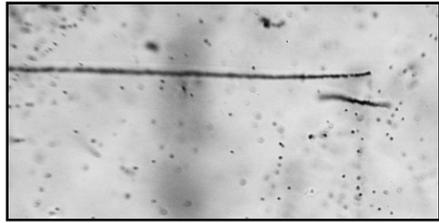
mu bigstar Nov 12 trans plate CIV- 10 82 85x60

mustar_decay21CIV8 95 73x00

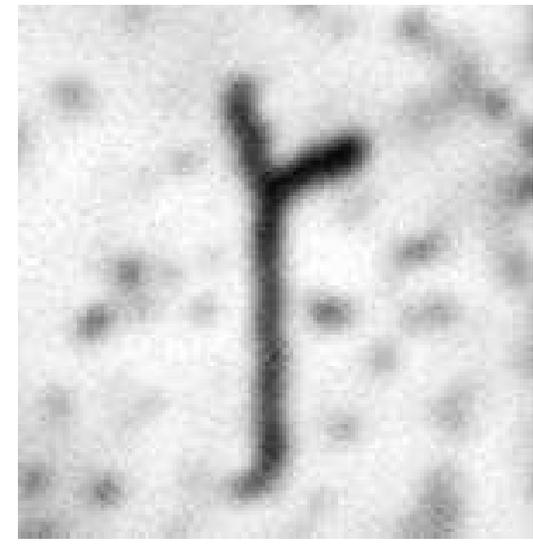
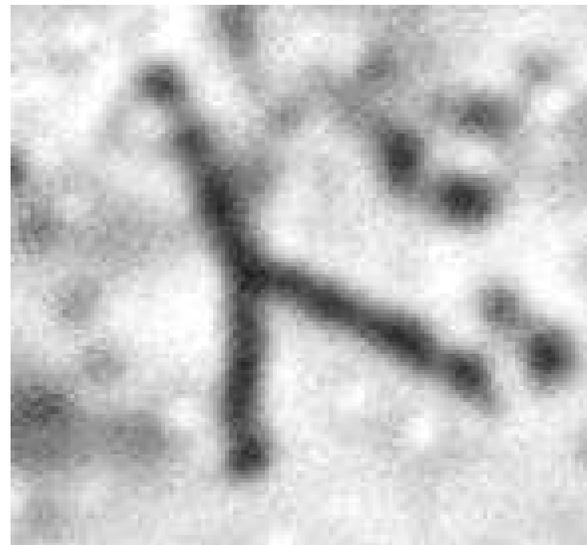
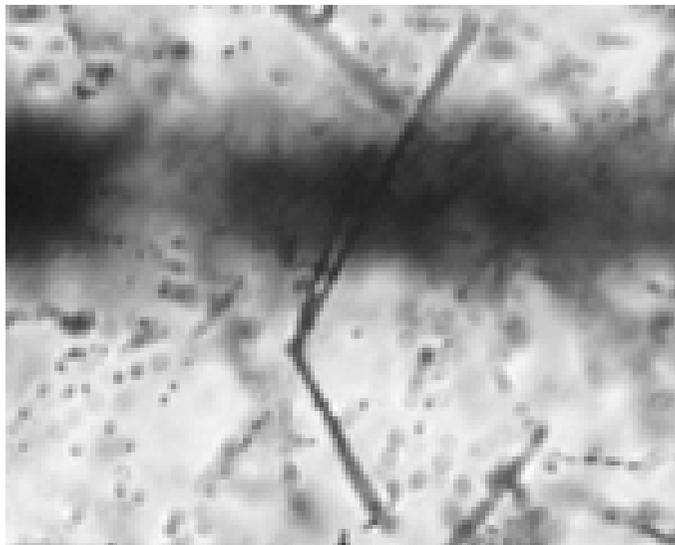
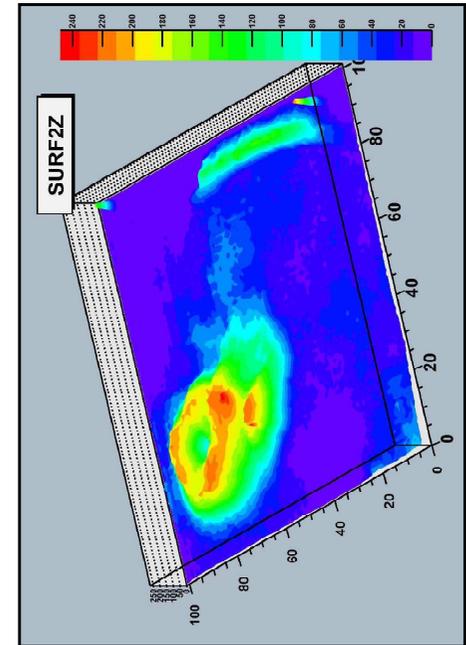
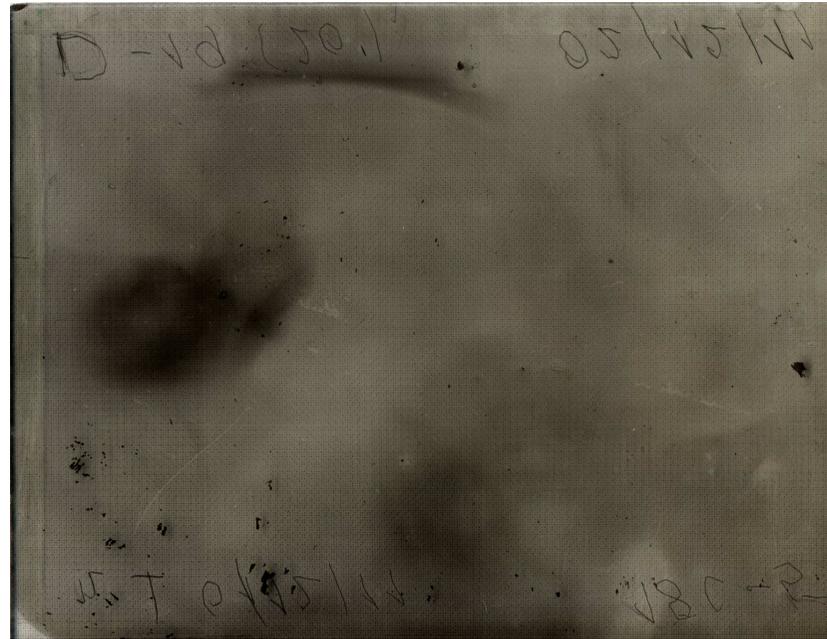
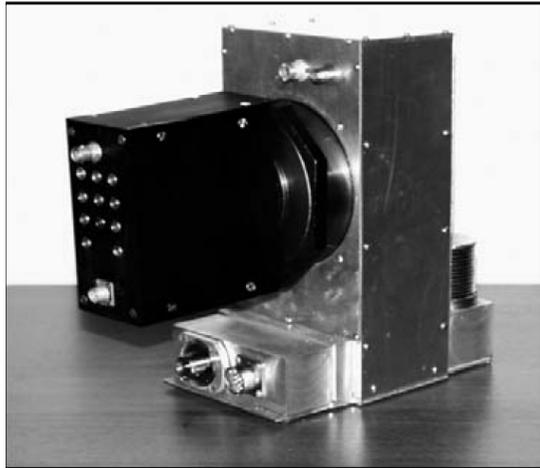
Muon 21CIV-10-13 transverse exp

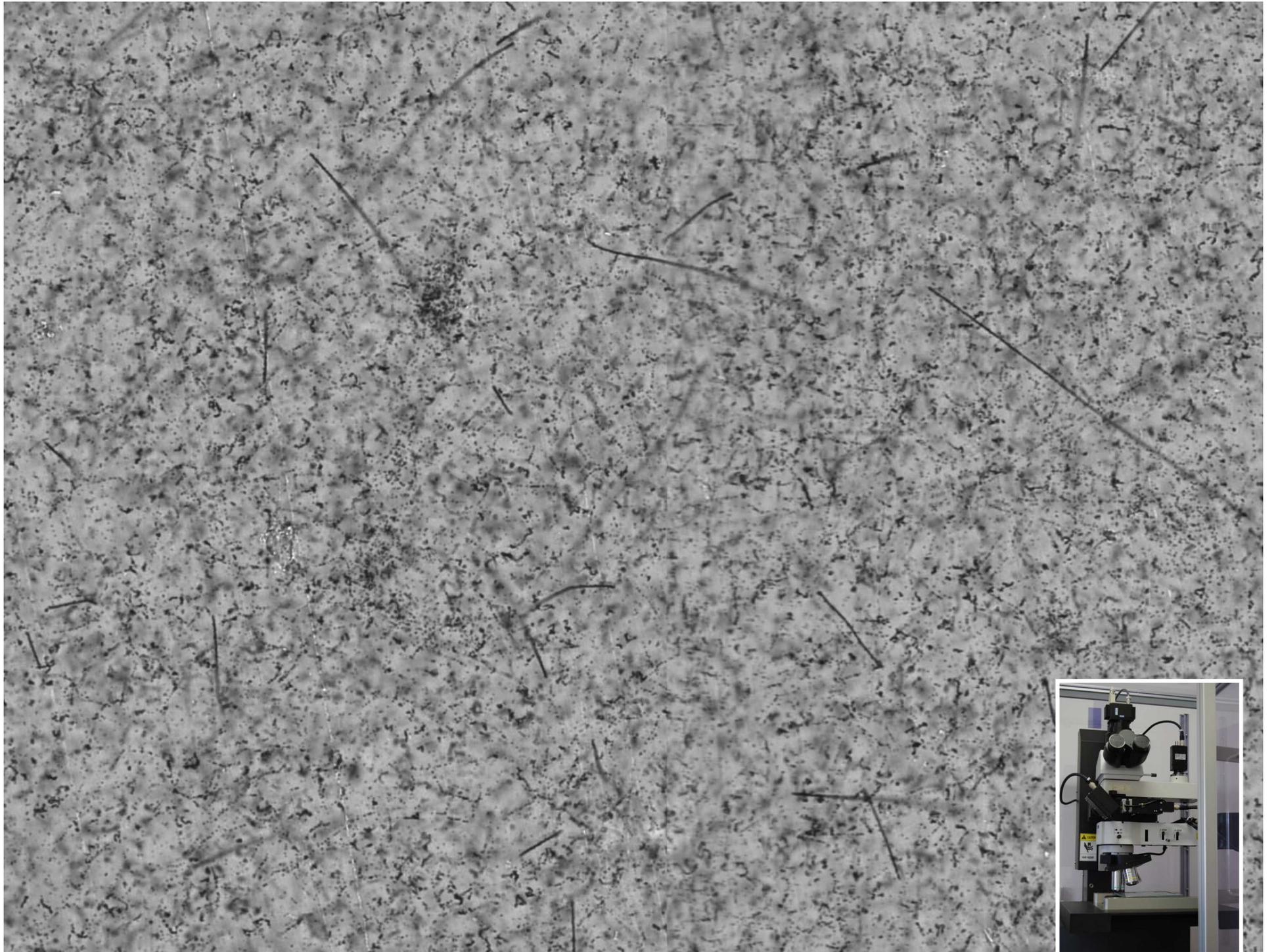






Correlations of α -particles in splitting of ^{12}C nuclei by 14.1 MeV neutrons





IBR 30m Thermal Neutrons x20

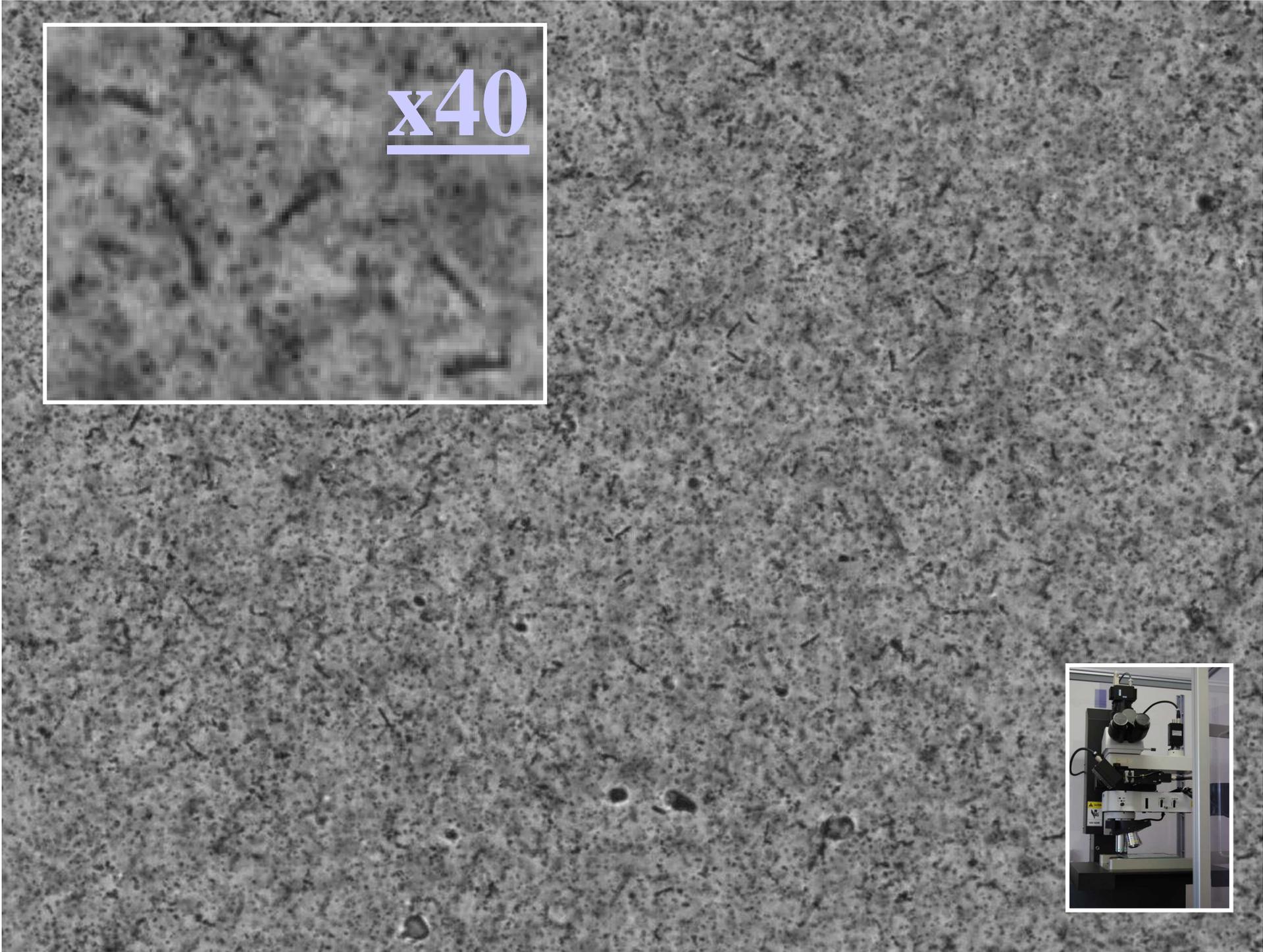


x20

x60

x90

NO Boron



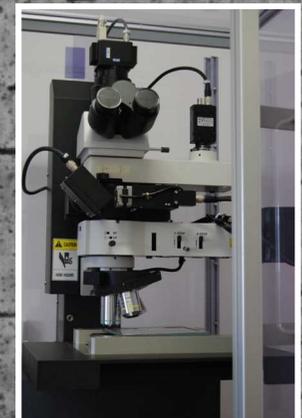
x40

Implantation of Kr and Xe ions

x90

Kr

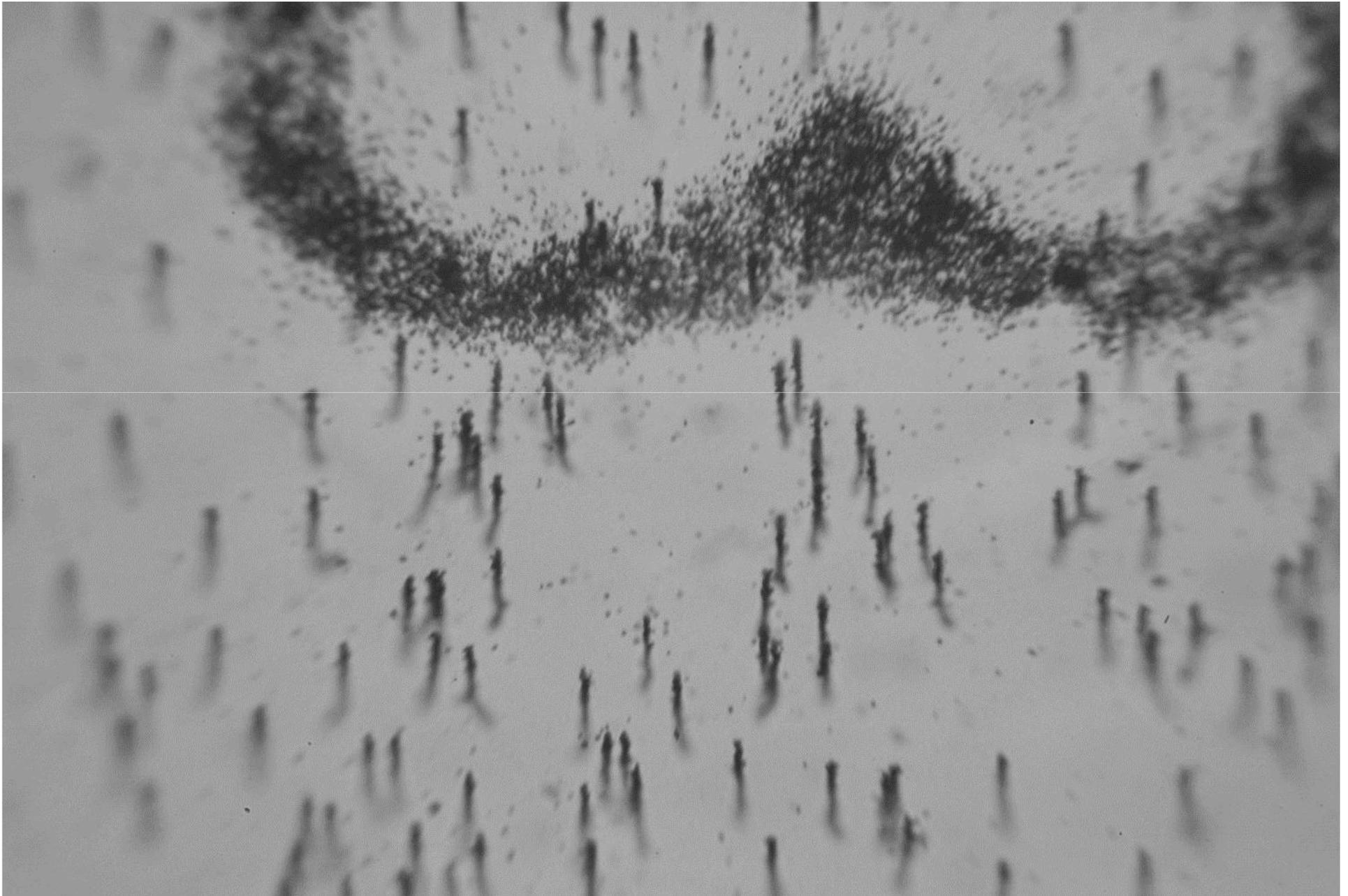
Xe



x90 Kr



x90 Xe



Conclusions

An extensive collection of macrophotos and videos about the interactions of relativistic nuclei is created.

For its development is required to move from step photography to a continuous video recording.

Current level of collection requires a new level of logistics for accessing to files or new software interface.

Our purpose consisted in drawing attention to the evergrowing collection. Our materials can be easily accessed and used for development of intuition, thinking about new researches and pedagogical work.

Thank you for your attention!