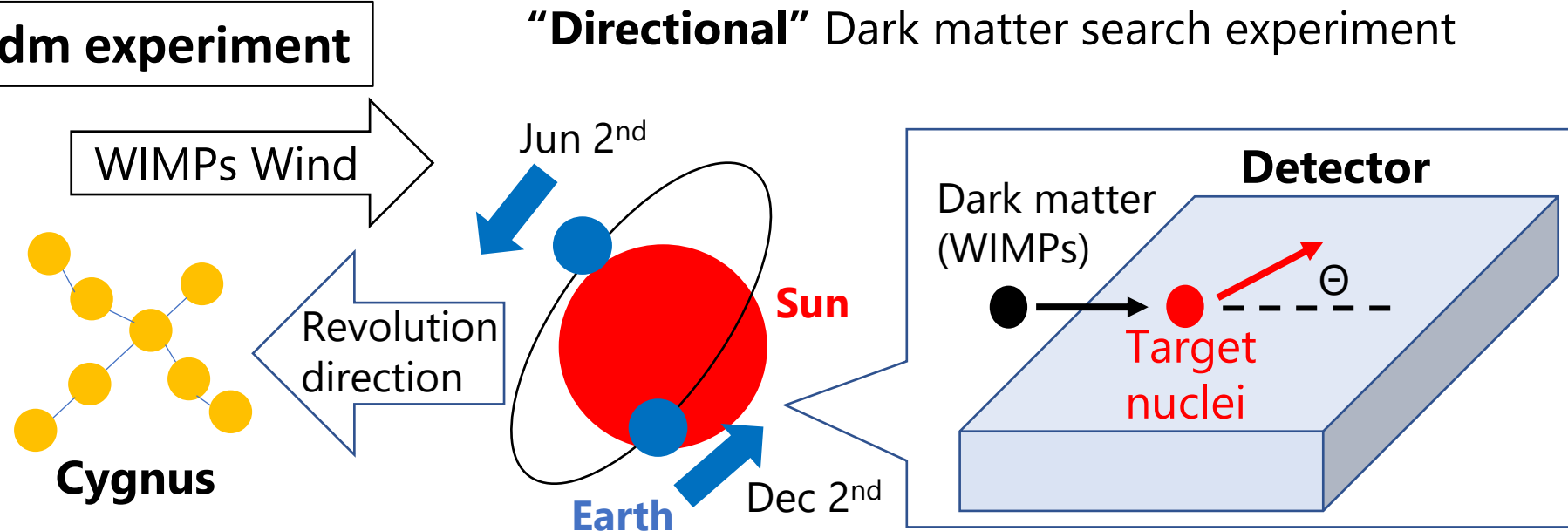


Development of High speed readout machine for directional dark matter search experiment NEWSdm

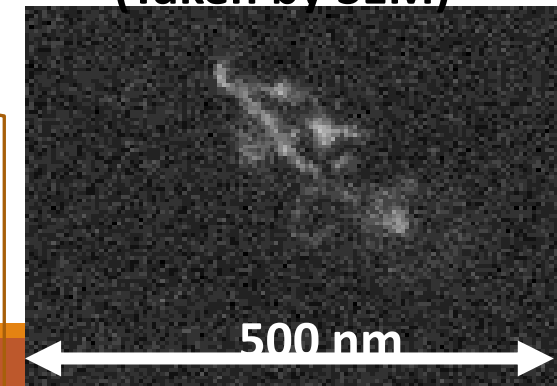
NEWSdm experiment



NIT : super fine grained emulsion is solid state tracking detector which has highest spatial resolution



Ex) 100 keV C ion
(Taken by SEM)



T. Naka et al., Nucl. Inst. Meth. A 718 (2013) 519-521
T. Asada, T. Naka et. al., PTEP (2017) 2017 (6) : 063H01

My study : developing high speed scanning machine

PTS : Post Track Selector

Automatic high speed scanning machine
for sub- μm track recorded in NIT

PTS aims to combined

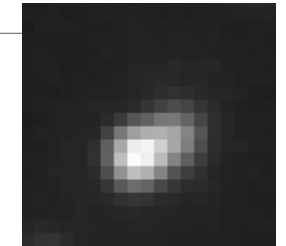
- **high speed scanning**
(more than 10 kg/year)
- **high spatial resolution**
(to read out sub- μm Track information)

Contents of Poster

- How to read out Track information from NIT
- Recently status of developing PTS

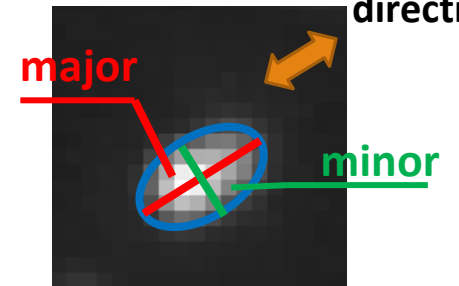


100 keV C ion



1 μm

Track
direction



History of scanning speed

