



Tomoya NAGAYAMA

PhD (2023-2026)

tomoya.nagayama@3sr-grenoble.fr

Bio-inspired soft robotics for underground exploration

Supervision: Cino VIGGIANI and Luc SIBILLE (3SR)
Barbara MAZZOLAI and Emanuela Del DOTTORE (IIT)

Funding: UGA, Istituto Italiano di Tecnologia

1st year at 3SR

Characterizing root-soil interaction (in the presence of obstacles) using tomography

2nd year at IIT(Genova)

Building up robots with single functions

3rd year at 3SR

Characterizing soil-robot interactions using tomography

The research team includes:
Nicolas LENOIR and Robert PEYROUX (3SR)



Agar



Maize seed



2022



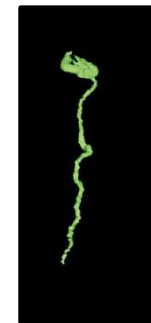
2023



Plantoid in IIT



two-layer soil
(previous work)



root trajectory
from x-ray tomo

