



IPS-161 Biological Collections

Group 2 - Practicals

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Digitization + 3D Practical

- Digitization with Jere Kahanpää
- Micro-CT with Max Salvador



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(1/2)

Why?

- Access
- Inventory
- Safety

Submission <http://id.luomus.fi/KW.2417> [Print](#)

Show extra info  

There is no secured data in this submission.

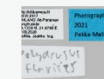
Collection: Hymenoptera Eastern Fennoscandia (Luomus)
Collection quality:  Professional / professionally curated

Observer(s)/ Collector(s): Mattila, Jaakko
Time: 2020-07-07
Locality names: Europe, Finland, Varsinais-Suomi (V), Parainen, Jungfruskär

Species: *Polydrusus flavipes* 
Det.: Mattila, Jaakko
Count: 1
Life stage: adult
Images:  

Comments: [Comment](#)

Identifications: *Polydrusus flavipes* (De Geer, 1775) det. Mattila, Jaakko 27.02.2021 



Source of coordinates: Reported value

YKJ: 6683897:3171165

YKJ 1km: 6683:3171

<https://laji.fi/en/view?uri=http:%2F%2Fid.luomus.fi%2FKW.2417>



Digitization Set-up

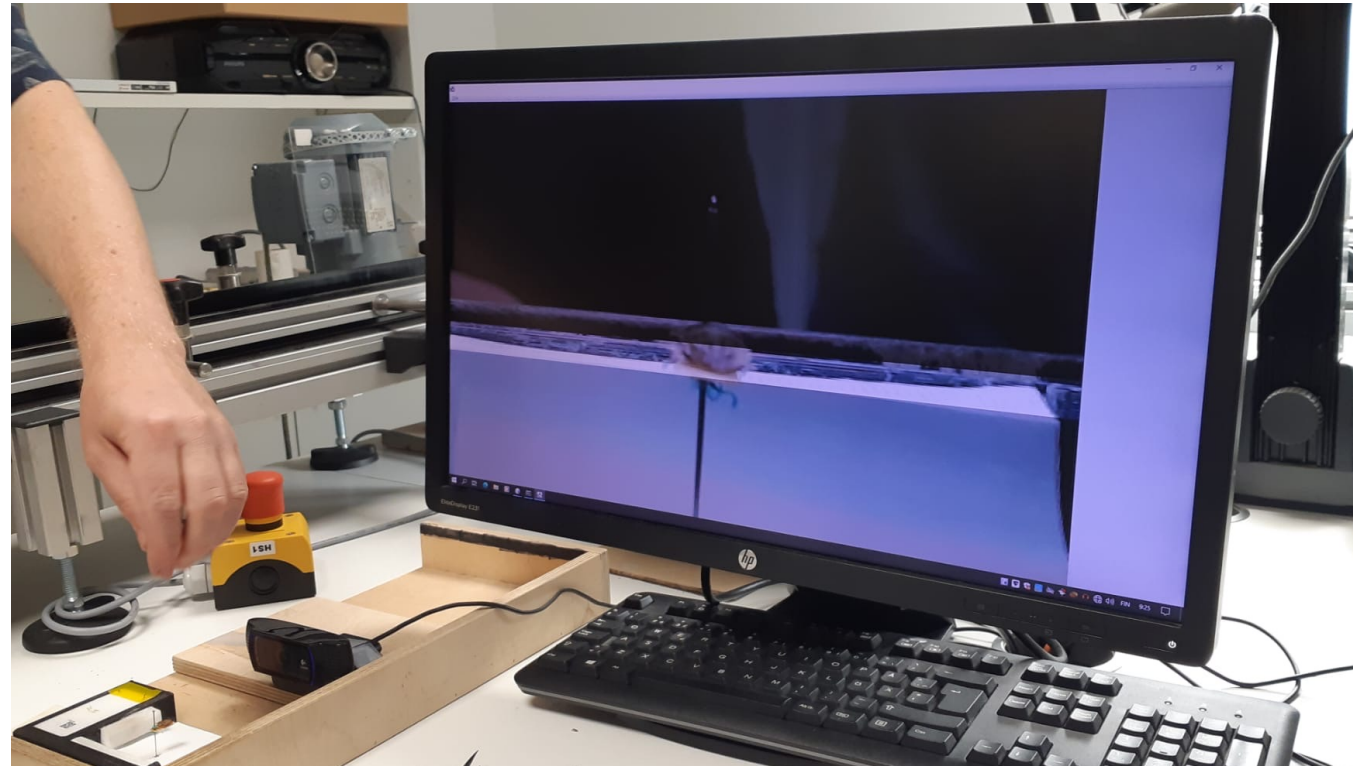
- Conveyor belt
- Webcam for specimen alignment
- Camera in the middle
- Two lights

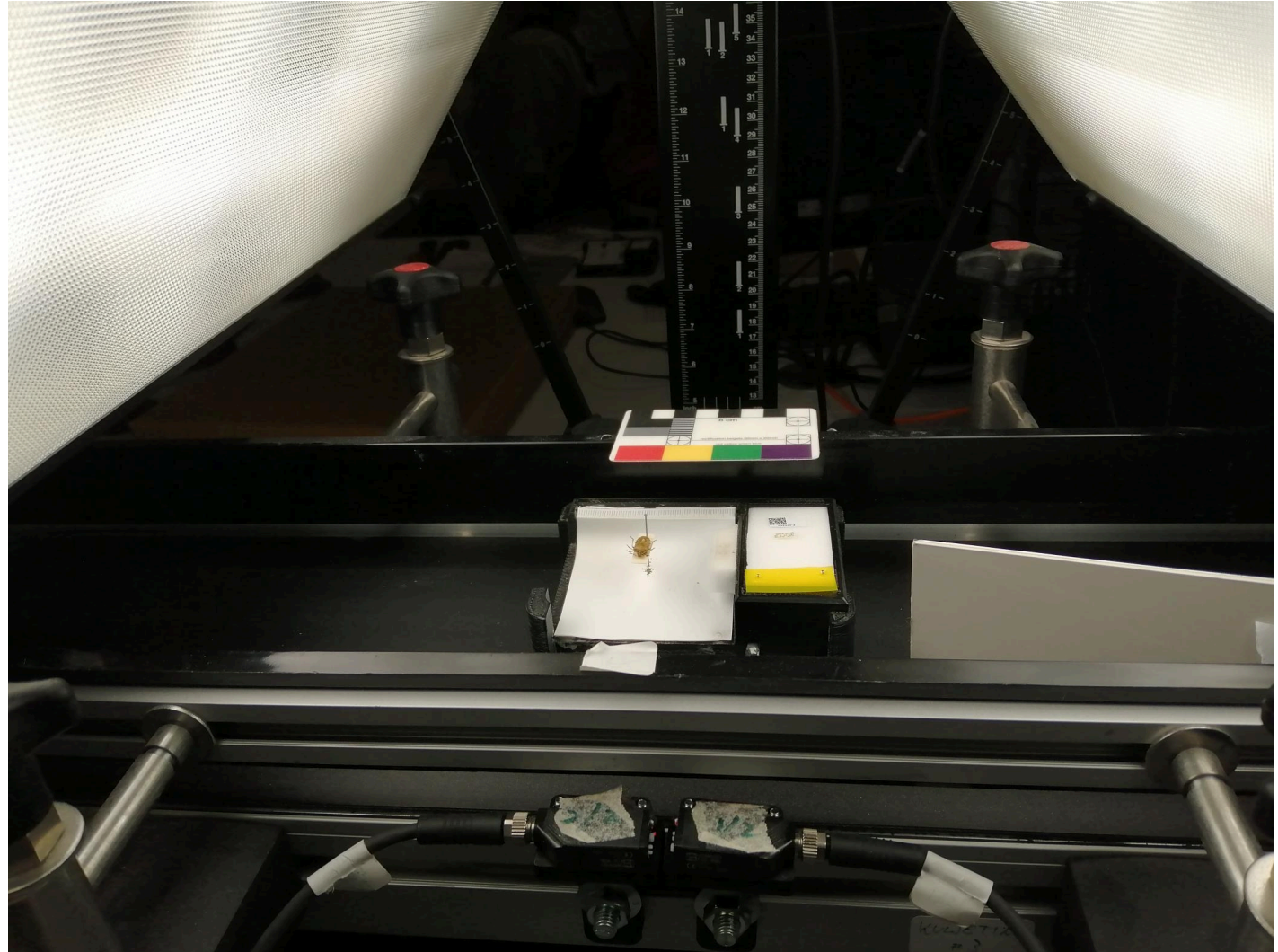
Digitization process

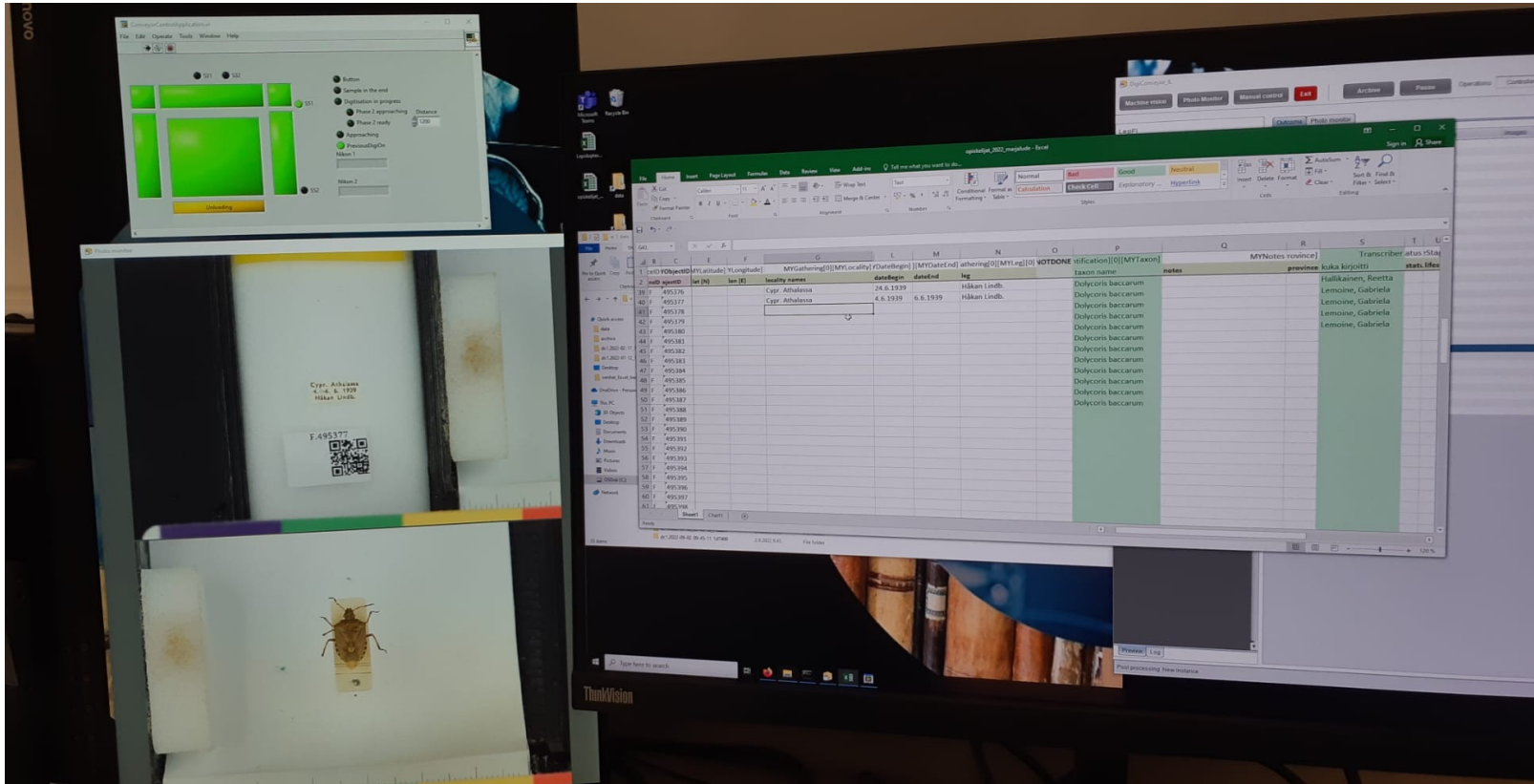


- Left: Original labels & ID and QR code
- Right: Pinned specimen

Centering the specimen







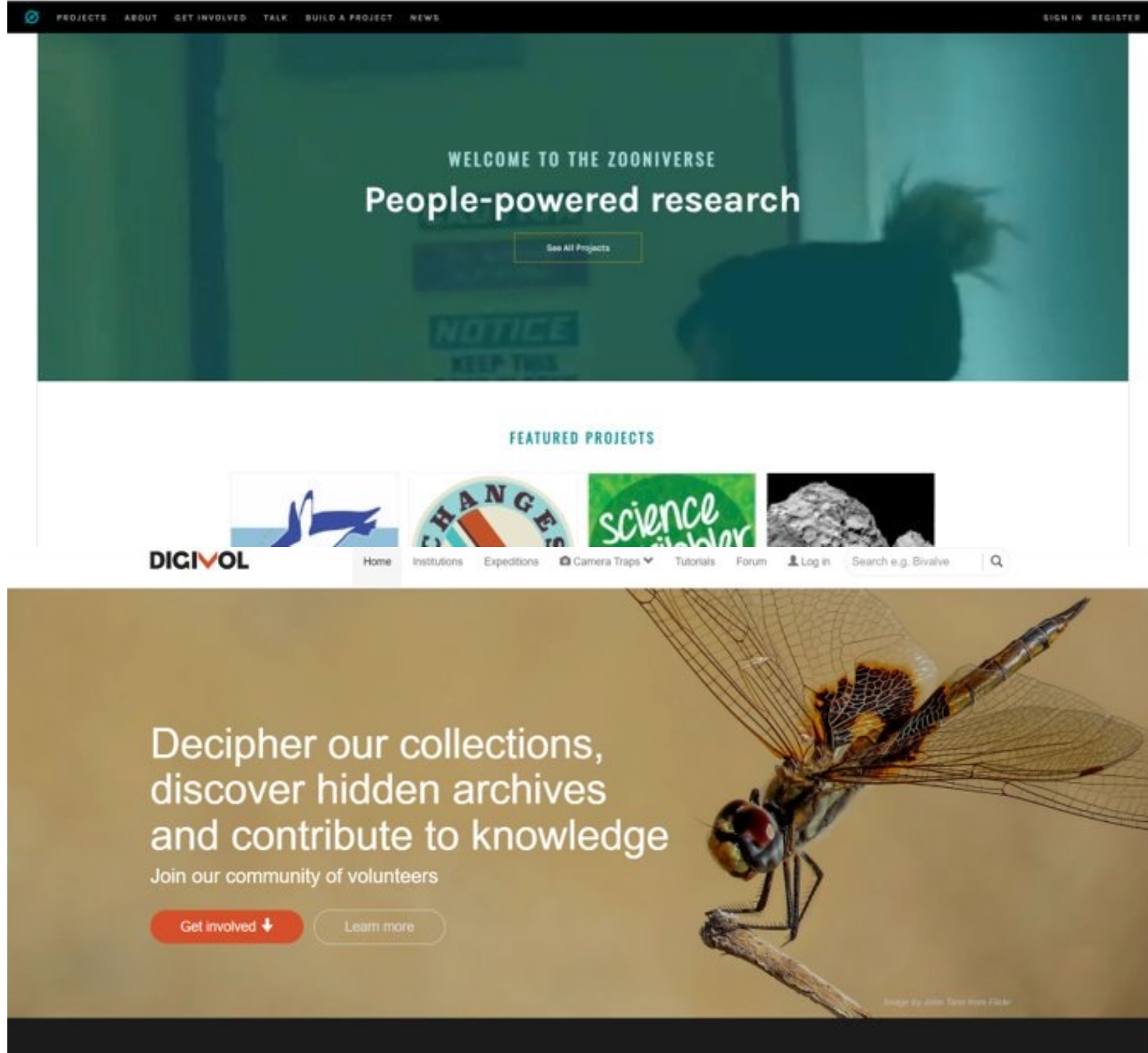
- ID
- Locality names
- Date collected
- Collector's name
- Species name
- Person digitizing



Our rate was 70 specimens per hour (the same rate as 1 pro)

Citizen science

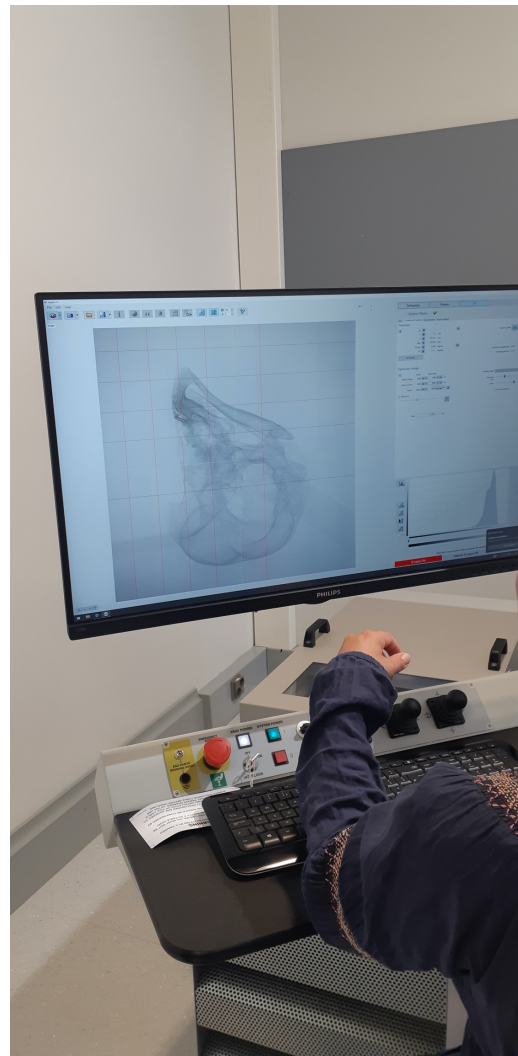
- Zooniverse.org
- Volunteer.ala.org.au



Micro Computed Tomography (Micro-CT)

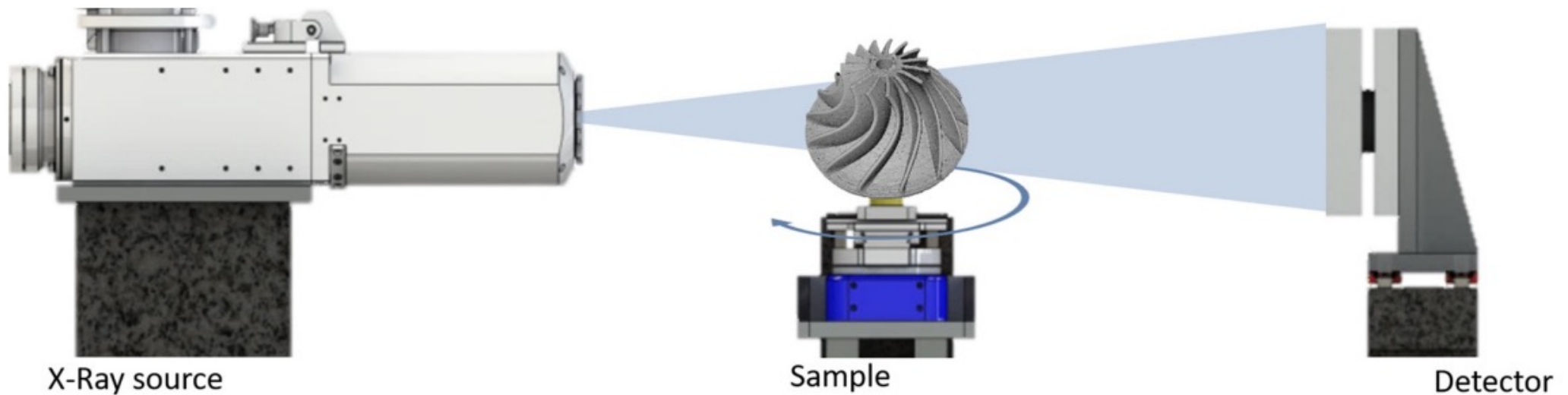


European honey buzzard
(*Pernis apivorus*)



How Micro-CT scan works

- Imaging the inside and outside
- X rays (high-energy, small wavelength)
- X rays absorbed or pass through
- 4475 slices



Stacked images

