DILS Retreat

November 16/17, 2023 – ISAS (Otto-Hahn-Straße 6b), Dortmund

BIBI

Thursday

9:30 **Arrival / welcome coffee**

10:00 **Welcome notes**

10:05 Tom Tubbesing
Unravelling microbiome adaptations in three production scale biogas plants

10:30 Benedikt Osterholz
Metagenomics-Toolkit: The flexible and efficient cloud-based metagenomics workflow with machine learning-enabled resource allocation

10:55 **Break**

11:25 Andreas Rempel
The pangenomics workbench

11:50 Luca Parmigiani
Comparing pangenome graphs using Panacus

12:15 Leonard Bohnenkämper
Rearrangement-based small parsimony

12:40 **Lunch**

13:40 Manuel Feser
On the way to plant data commons

14:05 **Keynote:** Jianxu Chen
Image analysis for optical microscopy in the era of AI

14:45 **Break**

15:00 Maximilian Wolf
Meta-analysis and bias correction of fecal metaproteomic datasets

15:25 Emanuel Lange
A roadmap for the MPA-Pathway-Tool towards simplified modeling and data integration

15:50 Muhammad Elhossary
Alternative approaches for genome-wide identification of bacterial small RNAs based on sequencing data

16:15 **Break**

16:45 Vanessa Scharf (application)
Construction and analysis of knowledge graph representation of bacterial small RNAs and their interactions

17:10 Luna Pianesi (application)
Graph neural networks and explainable AI for a new Aurora kinase inhibitor

17:35 **End of program**

19:00 **Dinner / Social Event**
Hicc Upp (Wittener Straße 205)

Friday

9:00 **Start of program**

9:00 Daniel Göbel, Michael Beckstette
CloWM – Cloud based Workflow Manager

9:45 *Hands-on-session: Working with CloWM*

(in parallel: faculty meeting)

10:30 **Break**

11:00 Tutorial continued

(in parallel: faculty meeting)

12:30 **Lunch / End of program**