



Subtomogram averaging workshop for cryo electron tomography

25-27 October 2023

Venues

25-26/10-23

Department of Biochemistry and Biophysics
Seminar room at KÖL, K438 (first lecture only)
Computer room at KÖL, K343
Stockholm University, Svante Arrhenius väg 16C
Stockholm

27/10-23

SciLifeLab
Seminar room in building gamma 2, Air&Fire
Tomtebodavägen 23A
Solna

Organising committee

Daniel Castaño-Díez, Instituto Biofisika (CSIC-UPV/EHU)
Dustin Morado, Stockholm University
Karin Walldén, Stockholm University
Marta Carroni, Stockholm University

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Course program

Subtomogram averaging workshop for cryo electron tomography

25-27 October 2023

Teacher:

Daniel Castaño-Díez

Assisting tutors:

Dustin Morado

Raffaele Coray

Alma Vivas

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Wednesday, 25 October		Venue
9h00	Opening remarks & practicalities	K438
9h05	Introduction to Subtomogram Averaging	K438
10.00	<i>Coffee/tea break</i>	<i>K438</i>
10h30	General Introduction to Dynamo tools for Subtomogram Averaging	Computer Room, K343
12h30	<i>Lunch & coffee/tea break</i>	<i>Lantis</i>
13h30	General Modelling of tomograms: filaments, vesicles and mebranes	Computer Room, K343
15h00	<i>Coffee/tea break</i>	<i>Outside K343</i>
15h30	Tomography processing tools: Template matching, classification through PCA. Automated Alignment of tilt series.	Computer Room, K343
18h00	<i>Dinner at KTH (30 min walk or 20 min tube ride away)</i>	<i>Hyllan, KTH Malvinas väg 4</i>
Thursday, 26 October		Venue
9h00	Opening remarks & practicalities	Computer Room, K343

9h05	Hands-on case I: FHV virus.	Computer Room, K343
10.00	<i>Coffee/tea break</i>	<i>Outside K343</i>
10h30	Hands-on case I: HIV1 virus-like particles: preprocessing	Computer Room, K343
12h30	<i>Lunch & coffee/tea break</i>	<i>Lantis</i>
13h30	Hands-on case II: HIV1 virus-like particles: Dynamo processing for particle picking and medium resolution.	Computer Room, K343
15h00	<i>Coffee/tea break</i>	<i>Outside K343</i>
15h30	Hands-on case II: HIV1 virus-like particles: Refinement with Relion	Computer Room, K343
Friday, 27 October		Venue
9h00	Short student presentations in combined ppt	Air & Fire
	Group discussions/Consutation on individual projects	Air & Fire
10h00	<i>Coffee/tea break</i>	<i>Outside Air & Fire</i>
	Group discussions/Consutation on individual projects	Air & Fire
	Final remarks	Air & Fire
12h00	<i>Lunch & coffee/tea break</i>	<i>Outside Air & Fire</i>

Acknowledgements of our financial support:

