



SPHIRE Workshop

High-Resolution cryoEM and
Single-particle-analysis

Bonn, 11-12 September 2017
6th International Caesar Conference

MONDAY, September 11th 2017

- 09:00h** **OPENING LECTURE:** SPARX: How everything began
Pawel Penczek
- 09:30h** **LECTURE:** SPHIRE: Concept of the new software package
Toshio Moriya
- 10:00h** **PRACTICAL:** SPHIRE GUI, General remarks, Settings
Christos Gatsogiannis
- 10:20h** **PRACTICAL:** SGE job submission, Movie alignment, Drift
Assessment
Markus Stabrin
- 10:50h** **PRACTICAL:** CTF estimation and assessment
Toshio Moriya
- 11:25h** **PRACTICAL:** Particle picking
Christos Gatsogiannis
- 12:00h** **LUNCH**
- 13:00h** **LECTURE:** ISAC- 2D Classification
Pawel Penczek
- 13:30h** **PRACTICAL:** ISAC-2D Classification
Christos Gatsogiannis
- 14:00h** **LECTURE:** RVIPER – Initial 3D Model
Pawel Penczek
- 14:30h** **PRACTICAL:** RVIPER – Initial 3D Model
Christos Gatsogiannis

- 15:30h** **GROUP PHOTO**
- 15:45h** **COFFEE BREAK**
- 16:15h** **PRACTICAL:** Preparation of data for 3D Refinement
Christos Gatsogiannis
- 16:45h** **LECTURE:** MERIDIEN – high resolution 3D refinement
Pawel Penczek
- 17:30h** **PRACTICAL:** MERIDIEN: high resolution 3D refinement
Toshio Moriya
- 18:15** **PRACTICAL:** Sharpening
Markus Stabrin
- 19:00** **DINNER**

TUESDAY, September 12th 2017

- 09:00h** **LECTURE:** 3D Variability and Sorting
Pawel Penczek
- 09:30h** **PRACTICAL:** 3D Variability
Toshio Moriya
- 10:00** **PRACTICAL:** 3D Sorting, Subset Refinement
Christos Gatsogiannis
- 10:30h** **LECTURE:** Local Resolution and Filtering
Toshio Moriya
- 10:45h** **PRACTICAL:** Local Resolution and Filtering
Christos Gatsogiannis
- 11:30h** **PRACTICAL:** Installation
Markus Stabrin
- 11:45h** **CLOSING REMARKS**
Christos Gatsogiannis
- 12:00h** **LUNCH**