

Computational Biology in Dresden?

Computational Biology in Dresden?



Ivo
Sbalzarini
TUD CSc & MPI-CBG



Michael
Hiller
MPI-PKS



Michael
Schroeder
TUD Biotech



Lutz
Brusch
TUD ZIH



Lars
Kaderali
TUD Klinikum



Gene
Myers
MPI-CBG



Ingo
Roeder
TUD Klinikum



Carlo
Cannistraci
TUD Biotech



Pavel
Tomancak
MPI-CBG



Axel
Voigt
TUD, CSc



Andreas
Deutsch
TUD, ZIH

Computational Biology in Dresden?

<http://comppbio-dresden.de>



Ivo
Sbalzarini
TUD CSc & MPI-CBG



Michael
Hiller
MPI-PKS



Michael
Schroeder
TUD Biotech



Lutz
Brusch
TUD ZIH



Lars
Kaderali
TUD Klinikum



Gene
Myers
MPI-CBG



Ingo
Roeder
TUD Klinikum



Carlo
Cannistraci
TUD Biotech



Pavel
Tomancak
MPI-CBG



Axel
Voigt
TUD, CSc



Andreas
Deutsch
TUD, ZIH

Computational Biology in Dresden YES!

<http://comppbio-dresden.de>



Ivo
Sbalzarini
TUD CSc & MPI-CBG



Michael
Hiller
MPI-PKS



Michael
Schroeder
TUD Biotech



Lutz
Brusch
TUD ZIH



Lars
Kaderali
TUD Klinikum



Gene
Myers
MPI-CBG



Ingo
Roeder
TUD Klinikum



Carlo
Cannistraci
TUD Biotech



Pavel
Tomancak
MPI-CBG

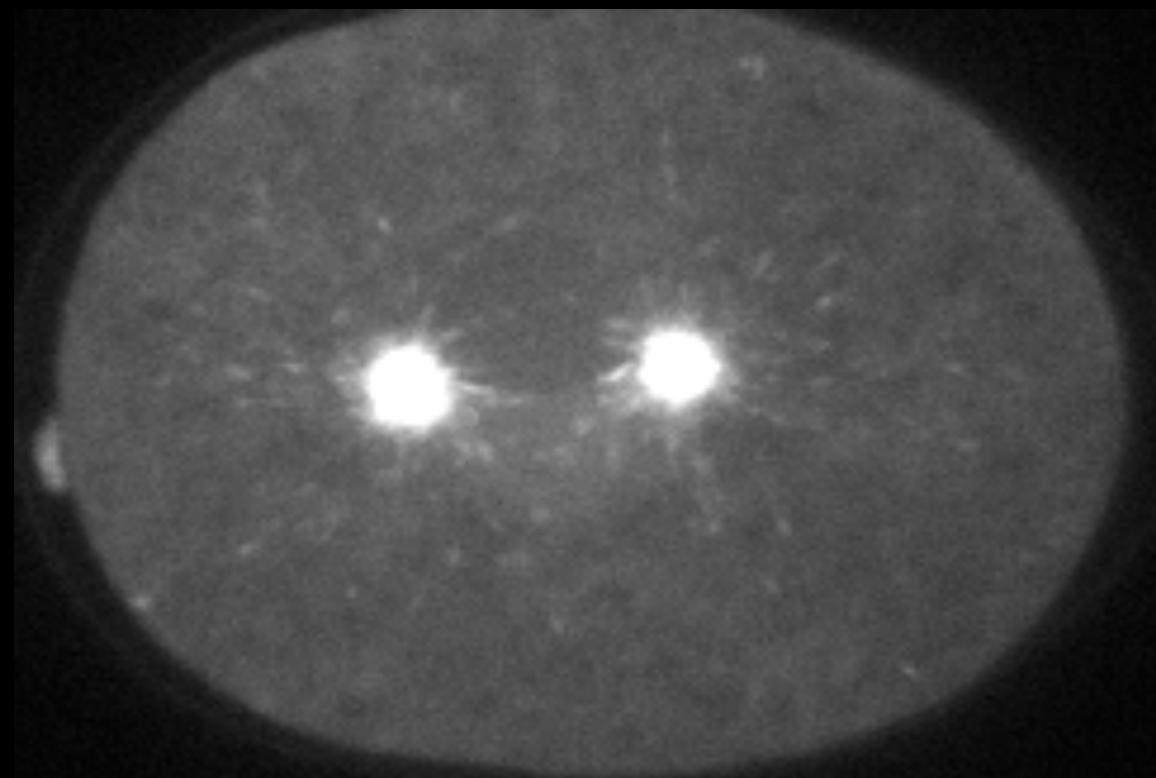


Axel
Voigt
TUD, CSc

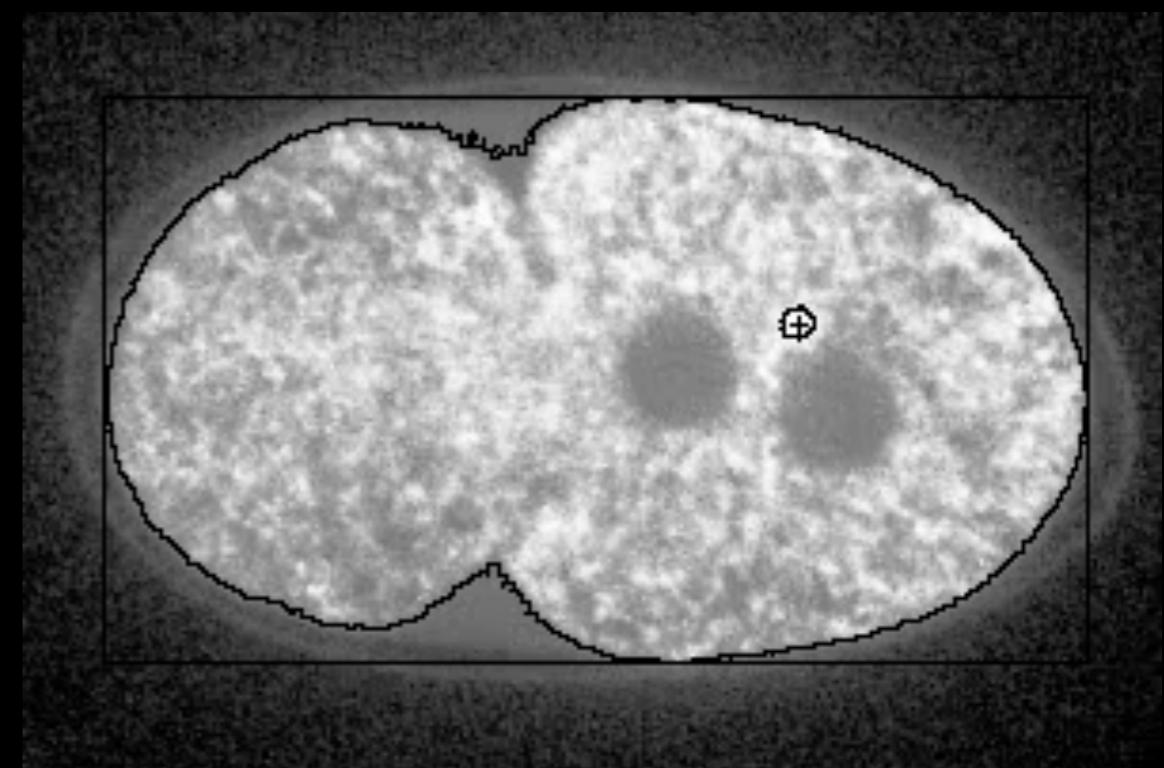


Andreas
Deutsch
TUD, ZIH

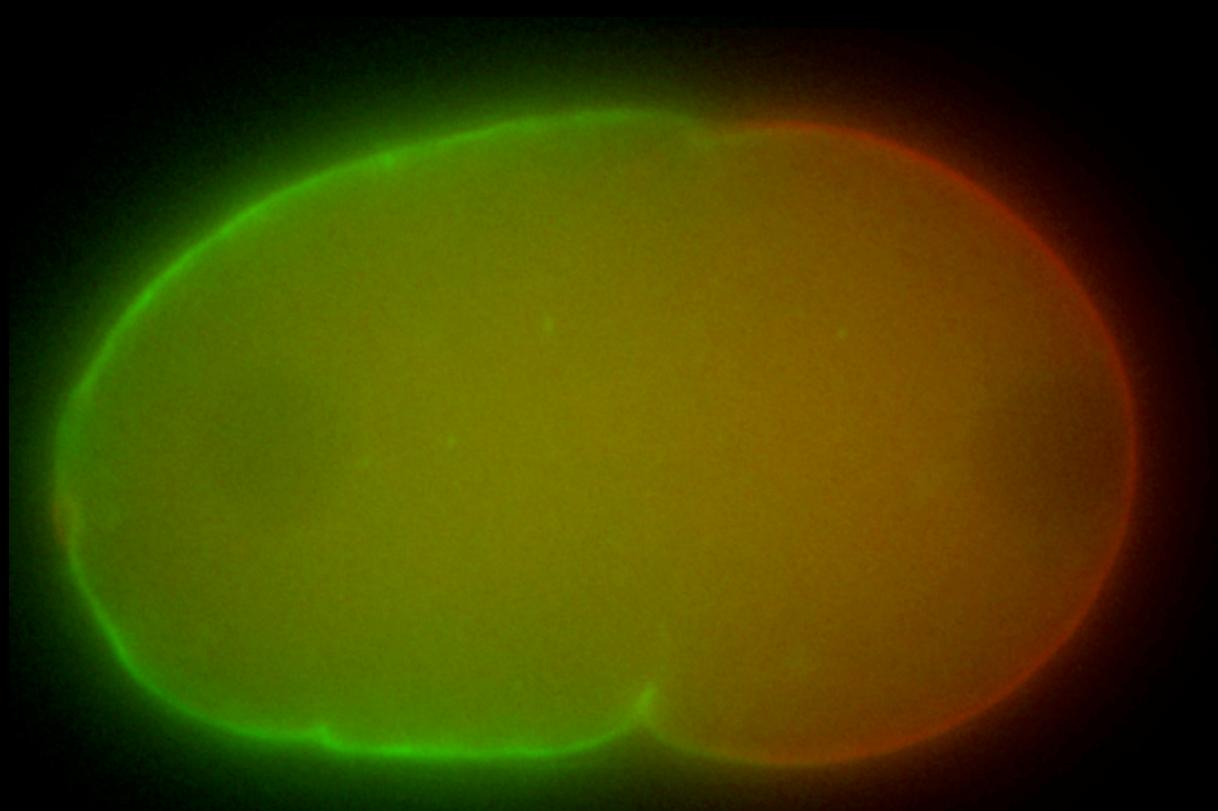
Views of a Cell



EB1 labelled tubulin
fibers.

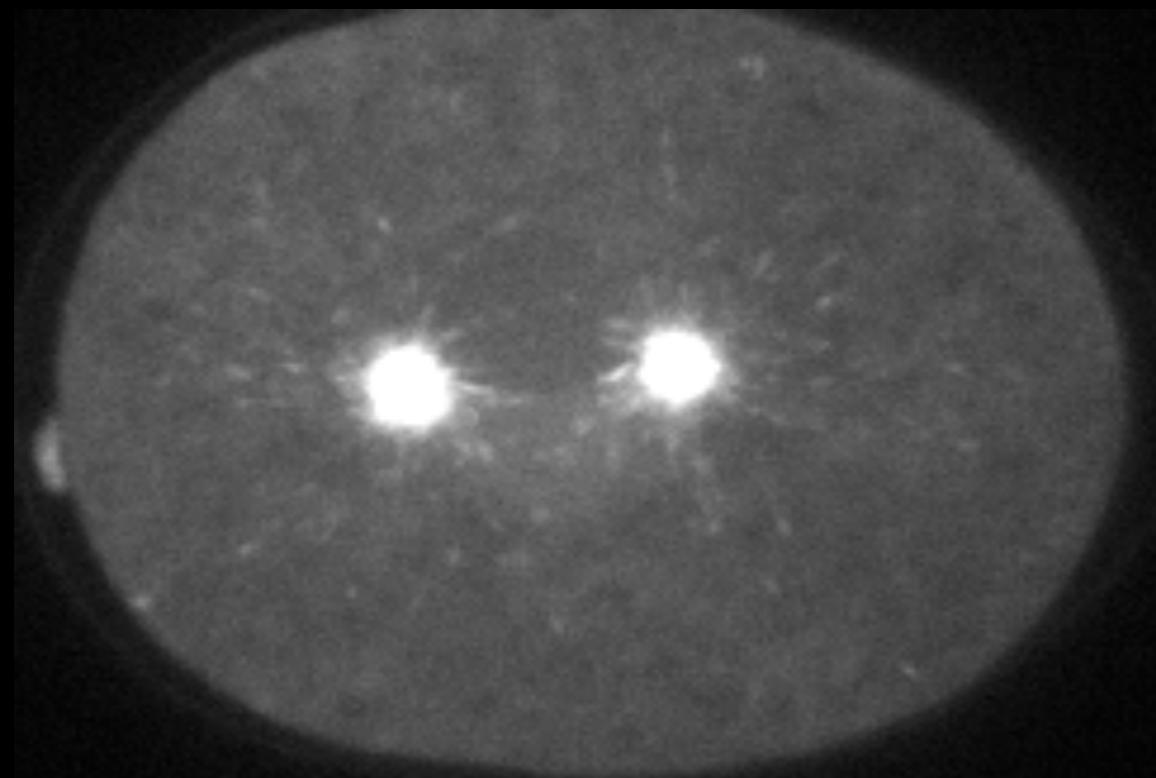


Gamma-tubulin labelled
centrosomes

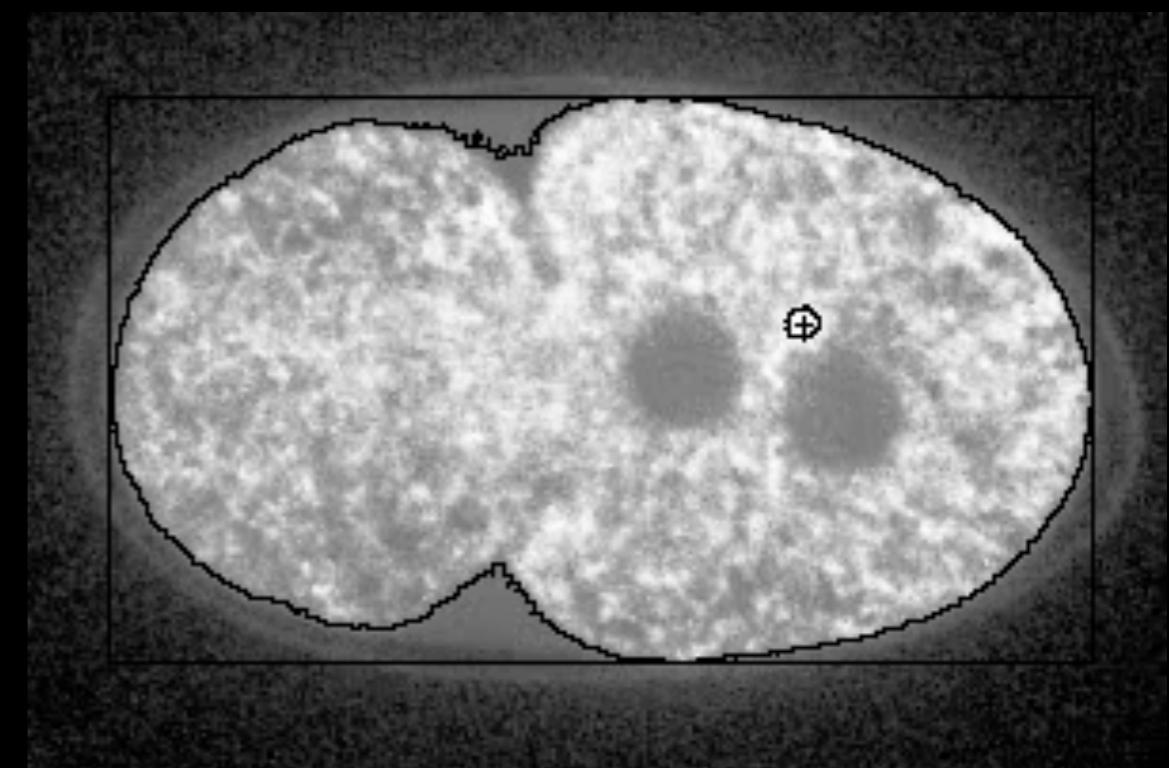


Par2-Par6 labelled
membranes

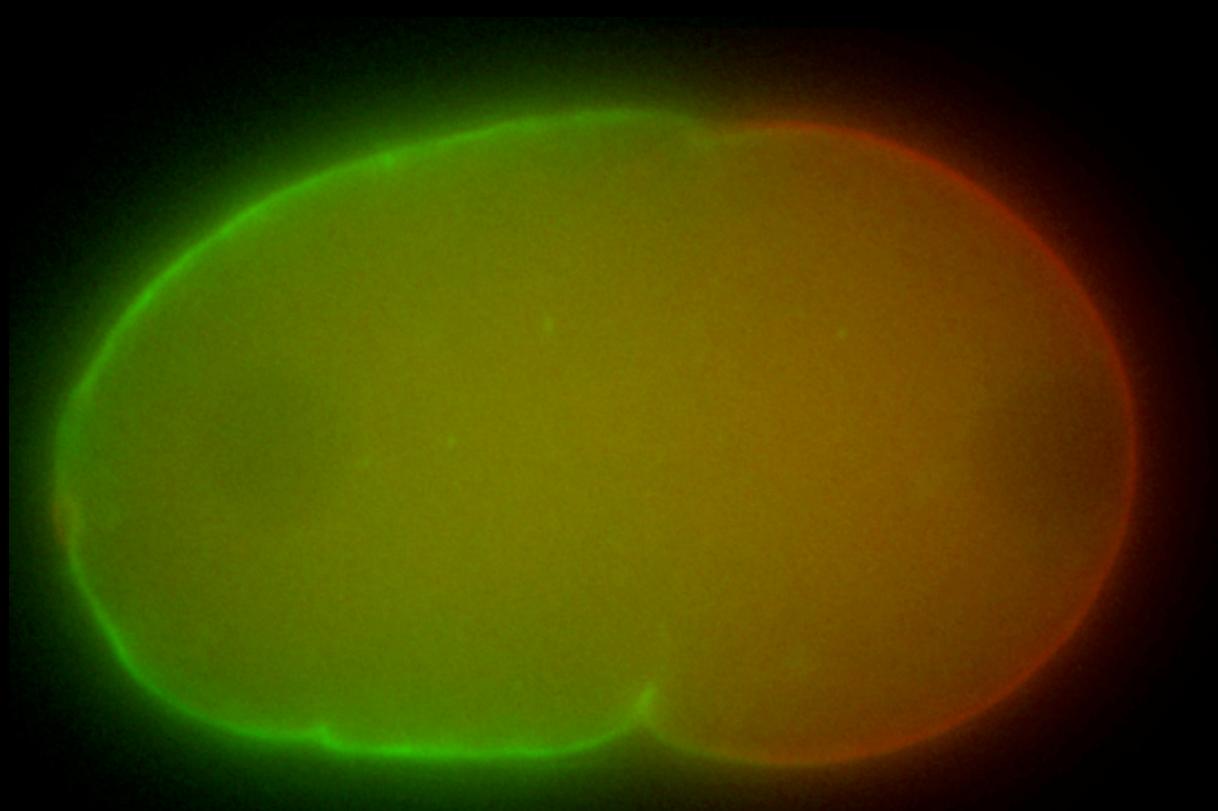
Views of a Cell



EB1 labelled tubulin
fibers.

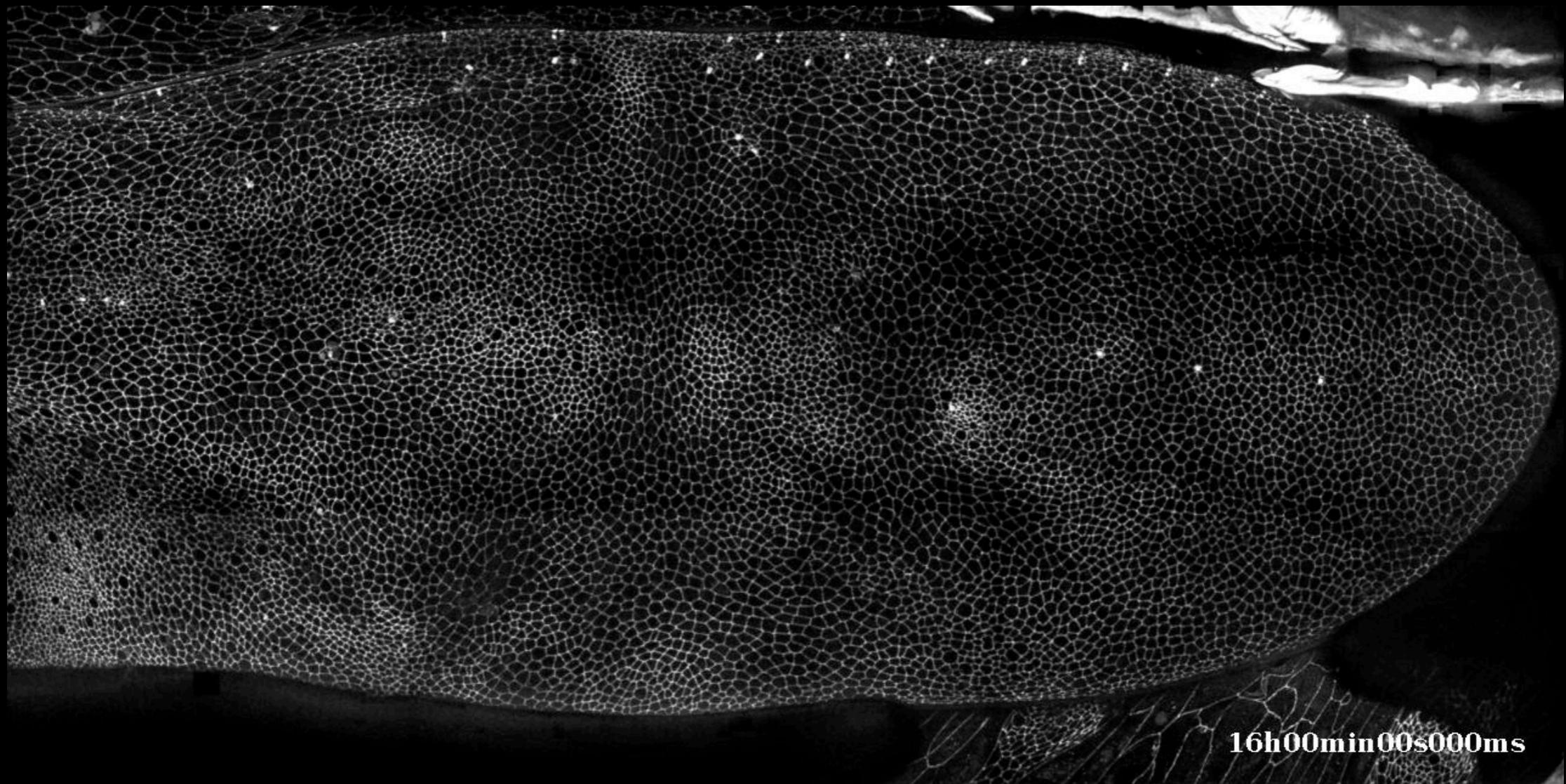


Gamma-tubulin labelled
centrosomes



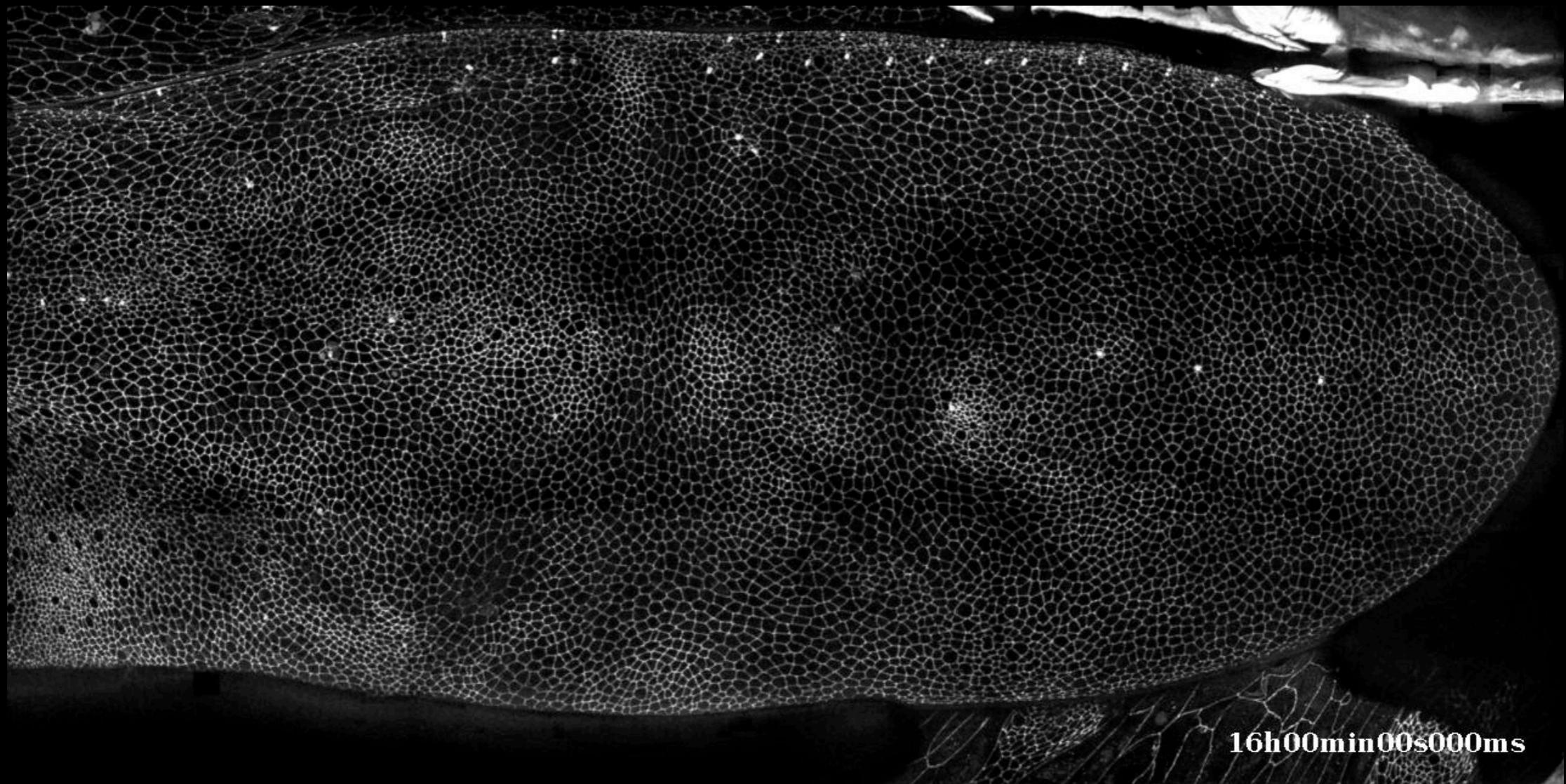
Par2-Par6 labelled
membranes

Fly Wing Development



16h00min00s000ms

Fly Wing Development





center for
systems biology
dresden

"Where computer science and physics meet biology."

[Home](#) [Research Groups](#) **Teaching** [ELBE Postdoc Program](#) [Jobs](#) [Contact](#)

Minor in Computational Biology and Bioinformatics

As truly multi-disciplinary fields, computational biology and bioinformatics unite computer science, mathematics, physics, and biology. This minor program provides an introduction to this exciting world and lays the foundation for later specialization during Master or PhD studies. The program is open to Bachelor and Diploma students from computer science, mathematics, and physics with an interest in biological systems and questions. Prior knowledge in biology is not required or assumed.

The minor runs over two years (4 semesters) and consists of 4 courses:

- 1st Semester (winter): Discrete Algorithms for Computational Biology
(Prof. Myers, Prof. Schroeder, Dr. Hiller)
- 2nd Semester (summer): Statistical Principles and Computational Methods
(Prof. Roeder, Prof. Kaderali, Prof. Rother)
- 3rd Semester (winter): Networks, Function and Genomics
(Prof. Schroeder, Dr. Hiller, Dr. Brusch)
- 4th Semester (summer): Modeling and Simulation
(Prof. Sbalzarini, Prof. Voigt, Prof. Deutsch)

The screenshot shows a web browser window with the following details:

- Tab Bar:** "Teaching" is the active tab.
- Address Bar:** www.mpg-sysbio.de/index.php?id=teaching
- Page Header:** "Teaching" with three colored dots (red, yellow, green) above it.
- Page Content:**
 - Logo:** A yellow circular logo with concentric arcs and small dots.
 - Title:** "center for systems biology dresden"
 - Slogan:** "*Where computer science and physics meet biology.*"

[Home](#) [Research Groups](#) **Teaching** [ELBE Postdoc Program](#) [Jobs](#) [Contact](#)

Minor in Computational Biology and Bioinformatics

As truly multi-disciplinary fields, computational biology and bioinformatics unite computer science, mathematics, physics, and biology. This minor program provides an introduction to this exciting world and lays the foundation for later specialization during Master or PhD studies. The program is open to Bachelor and Diploma students from computer science, mathematics, and physics with an interest in biological systems and questions. Prior knowledge in biology is not required or assumed.

The minor runs over two years (4 semesters) and consists of 4 courses:

- 1st Semester (winter): Discrete Algorithms for Computational Biology
(Prof. Myers, Prof. Schroeder, Dr. Hiller)
- 2nd Semester (summer): Statistical Principles and Computational Methods
(Prof. Roeder, Prof. Kaderali, Prof. Rother)
- 3rd Semester (winter): Networks, Function and Genomics
(Prof. Schroeder, Dr. Hiller, Dr. Brusch)
- 4th Semester (summer): Modeling and Simulation
(Prof. Sbalzarini, Prof. Voigt, Prof. Deutsch)

Comp. Bio. Minor (Nebenfach)

4 course, 2 year program (taught in English) SWS 4 (2+2) Oral exam

Comp. Bio. Minor (Nebenfach)

4 course, 2 year program (taught in English) SWS 4 (2+2) Oral exam

Ist Semester (winter):

Discrete Algorithms for Computational Biology
(Prof. Myers, Prof. Schroeder, Dr. Hiller)

Comp. Bio. Minor (Nebenfach)

4 course, 2 year program (taught in English) SWS 4 (2+2) Oral exam

1st Semester (winter):

Discrete Algorithms for Computational Biology
(Prof. Myers, Prof. Schroeder, Dr. Hiller)

2nd Semester (summer):

Statistical Principles and Computational Methods
(Prof. Roeder, Prof. Kaderali, Prof. Rother)

Comp. Bio. Minor (Nebenfach)

4 course, 2 year program (taught in English) SWS 4 (2+2) Oral exam

1st Semester (winter):

Discrete Algorithms for Computational Biology
(Prof. Myers, Prof. Schroeder, Dr. Hiller)

2nd Semester (summer):

Statistical Principles and Computational Methods
(Prof. Roeder, Prof. Kaderali, Prof. Rother)

3rd Semester (winter):

Networks, Function and Genomics
(Prof. Schroeder, Dr. Hiller, Dr. Brusch)

Comp. Bio. Minor (Nebenfach)

4 course, 2 year program (taught in English) SWS 4 (2+2) Oral exam

1st Semester (winter):

Discrete Algorithms for Computational Biology
(Prof. Myers, Prof. Schroeder, Dr. Hiller)

2nd Semester (summer):

Statistical Principles and Computational Methods
(Prof. Roeder, Prof. Kaderali, Prof. Rother)

3rd Semester (winter):

Networks, Function and Genomics
(Prof. Schroeder, Dr. Hiller, Dr. Brusch)

4th Semester (summer):

Modeling and Simulation
(Prof. Sbalzarini, Prof. Voigt, Prof. Deutsch)

Comp. Bio. Minor (Nebenfach)

4 course, 2 year program (taught in English) SWS 4 (2+2) Oral exam

1st Semester (winter):

Discrete Algorithms for Computational Biology
(Prof. Myers, Prof. Schroeder, Dr. Hiller)

2nd Semester (summer):

Statistical Principles and Computational Methods
(Prof. Roeder, Prof. Kaderali, Prof. Rother)

3rd Semester (winter):

Networks, Function and Genomics
(Prof. Schroeder, Dr. Hiller, Dr. Brusch)

4th Semester (summer):

Modeling and Simulation
(Prof. Sbalzarini, Prof. Voigt, Prof. Deutsch)

Planned: International Masters in Computational Science:

Comp. Bio. Minor (Nebenfach)

4 course, 2 year program (taught in English) SWS 4 (2+2) Oral exam

1st Semester (winter):

Discrete Algorithms for Computational Biology
(Prof. Myers, Prof. Schroeder, Dr. Hiller)

2nd Semester (summer):

Statistical Principles and Computational Methods
(Prof. Roeder, Prof. Kaderali, Prof. Rother)

3rd Semester (winter):

Networks, Function and Genomics
(Prof. Schroeder, Dr. Hiller, Dr. Brusch)

4th Semester (summer):

Modeling and Simulation
(Prof. Sbalzarini, Prof. Voigt, Prof. Deutsch)

Planned: International Masters in Computational Science:

with a specialization in Computational Biology,
Computational Chemistry,
Numeric Computations

...