Who are we?

- **WP12 leader**: Heidi Korhonen (Denmark)
- **WP12 board**: Tanyu Bonev (Bulgaria), Michel Dennefeld (France), Roland Gredel (Germany), Petr Kabath (Czech Republic), Elina Lindfors (Finland), Alessandro Pizzella (Italy), and Martin Ward (UK)
- **OPTICON contact**: Gudrun Pebody (UK)
Core activities of WP12

Supports different types of schools

• Main school of the year: NEON Observing School
• Organising other events:
  • Life-long training: specialised workshops
  • Archival schools
  • ‘Hot Topics‘ conferences
  • Instrumentation oriented schools/workshops
• Developing synergies: joint events with ESO/IAU/other EU projects
NEON Observing Schools

- Organised yearly in different European observatories
- 16-20 participants
- Student selection striving to achieve diversity of origin and gender
- Meant for people without prior observing experience, but with a need to obtain it
- Small groups of students led by an experienced tutor
- Hands-on experience combined with expert lectures
- Students present their projects in the end of the school
2017 & 2018 NEON Schools

• 2017 NEON Observing School
  • On La Palma in September 2017 using the 2.5 metre Nordic Optical Telescope and Isaac Newton Telescope
  • 72 applicants
  • 16 students from 12 different countries and 16 institutes
  • 10 men and 6 women

• 2018 NEON Observing School
  • In Asiago Observatory in September 2018 using the 1.8m, 1.2m, and 90cm telescopes
  • 65 applicants
  • 20 students from 14 different countries and 20 institutes
  • 14 women and 6 men
  • First participant from the sub-Saharan Africa
What was new in the 2017 and 2018 NEON Observing Schools?

• **Focus on infra-red observations**
  - Lectures on infra-red techniques in all the observing schools
  - Two out of the four groups in the 2017 NEON School also used infra-red observations

• **Multi-messenger astrophysics**
  - One of the focus areas for WP12 in this OPTICON contract
  - In the 2018 NEON School we had
    - a lecture on MAGIC, and
    - remote connection to La Palma to see the observations in practice.
Instrumentation School

• The 1st OPTICON Instrumentation School
• July 3-12 2017, in Copenhagen
• Emphasis on ‘Transient Sky’
• Instrument Phase A study with a help of an experienced tutor
• 22 participants selected from 58 applicants (from 13 different countries)
• Eight engineering and 14 astronomy students
• Five women and 17 men
Mid-size IFU Spectrograph Investigating Cosmos

ALMOST
A Low-resolution Multi-Object Spectrograph for Transients

A new polarimeter for the NOT Transient Explorer

LOST
Low-resolution Spectropolarimeter for Transients
Observational Astrophysics: from proposals to publication

- 17-27 June 2019 in Tatranská Lomnica, Slovak Republic
- Jointly organised by OPTICON and ERASMUS+ programme *Per aspera ad astra simul*
- 49 applicants, 25 men and 24 women
- From 24 countries (largest Ukraine, UK, Slovakia, and Poland)
- Selected 30 students, 15 men and 15 women
- First week data reduction, last three days ‘TAC’ exercise, also some sessions on publications and careers
2019 NEON School

- 15-29 September in Rozhen Observatory + Sofia, Bulgaria
- Student selection on going, 41 applications, 20 men and 21 women
- From 17 countries (largest Germany, Italy, and Poland)
- Combined with a ‘Hot Topics’ conference with emphasis on proposal writing
Plans for 2020

• 2020 NEON Observing School, TBD (need your help!)
• Multi-messenger Astrophysics School
• 2nd Instrumentation School
• Archival school with ESO as an alternative for the 2020 NEON Observing School.
## Plans vs budget

<table>
<thead>
<tr>
<th>School</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEON</td>
<td>57kEUR</td>
<td>40kEUR</td>
<td>30kEUR</td>
<td>35kEUR</td>
</tr>
<tr>
<td>ESO/NEON</td>
<td>12kEUR</td>
<td></td>
<td></td>
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<tr>
<td>Instrumentation</td>
<td>21kEUR</td>
<td></td>
<td></td>
<td>15kEUR</td>
</tr>
<tr>
<td>SUNDIAL</td>
<td>3kEUR</td>
<td></td>
<td></td>
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<tr>
<td>'Hot Topics’</td>
<td></td>
<td></td>
<td>10kEUR</td>
<td></td>
</tr>
<tr>
<td>Proposal writing</td>
<td></td>
<td>12kEUR</td>
<td></td>
<td></td>
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<tr>
<td>Archival School</td>
<td></td>
<td></td>
<td></td>
<td>10kEUR</td>
</tr>
<tr>
<td>Multi-messenger</td>
<td></td>
<td></td>
<td></td>
<td>(15kEUR)</td>
</tr>
<tr>
<td>WP12 Board + Other</td>
<td>4kEUR</td>
<td>6kEUR</td>
<td>5kEUR</td>
<td>6kEUR</td>
</tr>
</tbody>
</table>

82kEUR  61kEUR  57kEUR  66kEUR

**In total 266kEUR (budget 266kEUR)**
NEON Observing Schools 2000 – 2018: 296 students, 148 men and 148 women

Home institute

Country of the home institute (3 students or more)

Nationality

Country of origin (3 students or more)
We have taken a detailed look at the students who took part in the first 10 NEON Observing Schools (2000-2012) and the three Archival Schools (2002, 2006, and 2008).

The NEON schools had 181 students: 93 women and 88 men

115 of the NEON School participants are still in astronomy (64%)

The Archival Schools had 59 participants: 29 women and 30 men

49 of the Archival School participants are still in astronomy (83%)
OPTICON schools are a community training programme, which delivers expert knowledge in infrastructure use and development, and helps to integrate newer communities. The main programme consists of a yearly NEON Observing school that gives hands-on observing experience to young astronomers at a professional telescope. Additionally, OPTICON organises other schools concentrating on different aspects of observational astronomy, life-long learning, and integrating communities.

### Observing Schools

![Observing School Image]

### Other Schools

![Other School Image]

### Calendar

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Jul - 12 Jul 2017</td>
<td>OPTICON Instrumentation School. The first OPTICON Instrumentation School will take place in Copenhagen.</td>
</tr>
</tbody>
</table>

### About Us

![About Us Image]

### How to Apply

![How to Apply Image]

All events

Opticon-schools.nbi.ku.dk