# **BND Graduate School 2017, Callantsoog, the Netherlands**

### Info-bulletin 1

### Introduction

The BND graduate school 2017 is a school intended for PhD students in experimental particle physics in the early phase of their career. It is part of the series of BND graduate schools, which are held annually, and rotate among organizing universities and institutes in Belgium, Germany and the Netherlands.

The school will be held from Monday September 4, lunchtime, to Friday September 15, lunchtime. Students are expected to arrive in the morning of Monday September 4 and leave in the afternoon of Friday September 15.

The focus of the lecture program will be on electroweak physics and detectors for charged particle tracking, but also quantum field theory, cosmology and dark matter, accelerators, and gravitational wave physics will be covered. There will also be excursions and evening lectures.

## Location

The BND Graduate School 2017 will be held in:

Fletcher Badhotel Callantsoog Abbestederweg 26 1759 NB Callantsoog the Netherlands.

The website of the hotel is https://www.badhotelcallantsoog.nl/en/.

Callantsoog is a quiet sea-side resort with a sandy beach, approximately one hour travel north of Amsterdam. The weather in September is variable and somewhat unpredictable, the long-term average temperature is 20 degrees centigrade. Some people claim that Callantsoog has the most hours of sun per year of all of the Netherlands.

Students will be lodged in double rooms in the hotel, and the fee covers all expenses: meals, lectures, excursions and boarding. Students may express preference with whom they wish to share their room by sending an e-mail to the school secretary (see bottom of this info sheet), if they have not done so during registration.

## **Transportation**

The closest train station to Callantsoog is Schagen, on the line between Amsterdam and Den Helder. Two intercity trains per hour run on this line, leaving Amsterdam Centraal at :09 and :39 past the hour, all trains stop in Schagen, the travel time is one hour.

From Schagen, public bus 152 travels once per hour, leaving :45 past the hour (schedule of July 2017, may change in September!), to Callantsoog, travel time is 25 minutes, and bus tickets can be purchased on board.

However, in the morning of September 4 and in the afternoon of September 15 we will arrange some transportation between Schagen and Callantsoog, details will follow later.

# **Lecture Program**

The full program of the school can be found on Indico:

https://indico.nikhef.nl/event/820/

(The time-schedule is preliminary, and may be subjected to changes).

### Lectures include:

- Quantum Field Theory (Alberto Mariotti, Vrije Universiteit Brussel)
- Electroweak Theory (Laura Lopez Honorez, Vrije Universiteit and Université Libre Bruxelles)
- Tracking Detectors (Jochen Kaminski, Universität Bonn)
- Cosmology and Dark Matter (Christoph Weniger, Universiteit van Amsterdam)
- Particle Accelerators (Rende Steerenberg, CERN)
- Gravitational Waves (Sarah Caudill, Nikhef and University of Wisconsin)
- Precision Experiments (Gerco Onderwater, Rijksuniversiteit Groningen)

In addition there will be student projects, a TEDx-inspired activity on the afternoon of Thursday September 7, an excursion on Saturday September 9, and evening lectures. The afternoon of Sunday September 10 is free.

## **Contact**

For questions regarding the school, please contact our secretary Joan Berger, jberger@nikhef.nl

Please let Joan know if you have any special requests (e.g. dietary) that you have not yet informed us about during registration. A second info-bulletin will be circulated late August.