



## QUANTUM UNIVERSE LECTURES

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### Ingrid Gregor (DESY)

“What you always wanted to know about  
detectors but never dared to ask!”  
*Basics on detectors for experts from other fields*

20, 27 November, and 4 December 2020 at 14.30h

Zoom:

<https://uni-hamburg.zoom.us/j/92293543262>  
(Meeting ID: 922 9354 3262, Passcode: 97540703)

**Abstract:**

In this lecture series I will give an overview of large experiments for particle physics and explain why they are designed as they are. Detector classification like “tracking detectors” or “calorimeter” will be introduced, with some examples how this is put into reality. Typical acronyms will be explained. The basics of the detection concepts underlying each type will be covered. Examples from current detectors, for example at the LHC, will give some more insights to the most popular technologies. Finally, some examples of physics measurements that in the past were limited by the detector performance will help to understand the beauty of current high-energy physics detectors.

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