



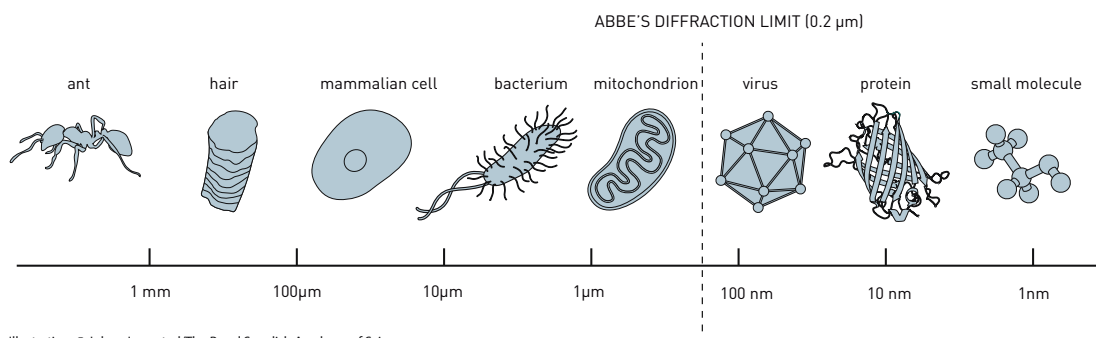
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THE ROYAL SWEDISH ACADEMY OF SCIENCES

# The Nobel Prize in Chemistry 2014

## at Kungsholmens gymnasium/Stockholms Musikgymnasium

12 December 2014



At the end of the 19th century, Ernst Abbe defined the limit for optical microscope resolution to roughly half the wavelength of light, about 0.2 micrometre. This meant that scientists could distinguish whole cells, as well as some parts of the cell called organelles. However, they would never be able to discern something as small as a normal-sized virus or single proteins. Eric Betzig, Stefan W. Hell and William E. Moerner are awarded the Nobel Prize in Chemistry 2014 for having taken optical microscopy into a new dimension using fluorescent molecules. Theoretically there is no longer any structure too small to be studied.

### PROGRAMME

**08.45 Lucia celebrations (Swedish tradition)**

*The choir of Stockholms Musikgymnasium*

**09.05 Welcome address**

*Ove Sköld, headmaster, Kungsholmens gymnasium/Stockholms Musikgymnasium*

**09.10 Introduction (in Swedish) to the Nobel Prize in Chemistry 2014**

*Ann Fernholm, science writer/journalist*

**09.25 Nobel Laureate Stefan W. Hell**

**09.55 Nobel Laureate William E. Moerner**

**10.25 Short break**

**10.35 Nobel Laureate Eric Betzig**

**11.05 How to get a Nobel Prize – A short guide**

*Sven Lidin, Chairman, The Nobel Committee for Chemistry*

**11.20 Why did I become a scientist, and why should you?**

*Maria Tenje, The Young Academy of Sweden & Uppsala University*

**11.35 Moderated questions to the Nobel Laureates**

**12.05 Mingle with the Laureates and pupils, signing of the official Nobel posters**

For more information regarding the Nobel Prizes, the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel and the Royal Swedish Academy of Sciences please visit <http://kva.se>