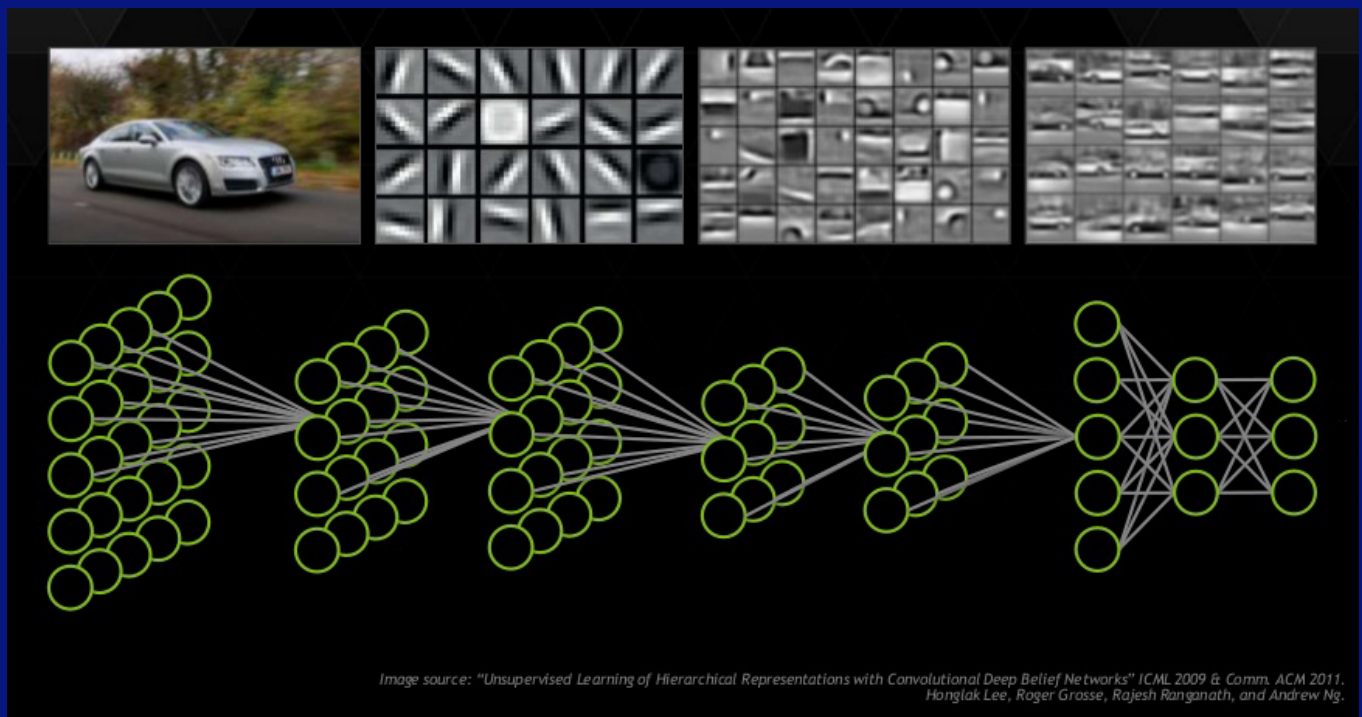


# Statistical Mechanics of Deep Learning

Prof. Dr. Bernd Rosenow, ITP Universität Leipzig  
Winter Term 2024/25

The lecture will discuss the Statistical Mechanics approach to understanding the general principles which underly the success of deep neural networks, including the analysis of Gibbs and online learning for teacher-student setups.

The theoretical analysis of deep networks will be accompanied by an introduction to the training of deep neural networks, for instance for the MNIST and Cifar data sets. An introduction to the use of PyTorch will be given.



adapted from [www.nvidia.com](http://www.nvidia.com)

Further information under <http://www.uni-leipzig.de/~stp/courses.html>