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## **Phys 343 project**

### Black body radiation

One of the most famous examples of Bose-Einstein statistics is its use in studying the black body radiation. By considering black body radiation as a gas of photons Bose-Einstein statistics.

In this project you will learn in detail about the statistical mechanics of black body radiation and summarise your understanding in the following points:

1. Density of states
2. Bose-Einstein statistics.
3. Black body radiation as photon gas

You should include the references in your project

- Mandl, Franz (1971). Statistical physics. Chichester: Wiley.
- David Tong: Lectures on Statistical Physics (2012)  
<http://www.damtp.cam.ac.uk/user/tong/statphys.html>

Best Regards,

**Dr Salwa Alsaleh**