

**Website:** <http://www.ss.ncu.edu.tw/~yhyang/112-1/pl.html>

Lectures and presentations, 18 weeks

**Evaluation:**

Homework: 20%

Exam: 60% (20% for each), 10/23, 12/4 (TBD), 1/8

Performance: 20% (including 5% progression report and  
15% A4 note for three exams)

Quiz: extra

## Textbooks:

- Introduction to Plasma Physics, R. J. Goldston and P. H. Rutherford, Taylor & Francis, 1995.
- Physics of Space Plasmas: An Introduction, G. K. Parks, Westview Press, 2004.
- Introduction to plasma physics : with space and laboratory applications, D. A. Gurnett and A. Bhattacharjee, Cambridge University Press, 2005.
- Elementary Space Plasma Physics, Ling-Hsiao Lyu, 2010.
- Introduction to Plasma Physics and Controlled Fusion, Volume 1: Plasma Physics, 3rd edition, Francis F. Chen, Springer, 2016.
- Plasma physics: an introduction to laboratory, space, and fusion plasmas, Alexander Piel, 2nd edition, Springer, 2017.

## **Solar:**

→**Solar Monitor:** <https://solarmonitor.org/>

→**Helioviewer:**

<https://www.helioviewer.org/>

→**Latest Events - LMSAL:**

[http://www.lmsal.com/solarsoft/last\\_events/](http://www.lmsal.com/solarsoft/last_events/)

→**The Sun Now - SDO:**

<https://sdo.gsfc.nasa.gov/data/>

## **Interplanetary Space:**

→**Real Time Solar Wind:**

<https://www.swpc.noaa.gov/products/real-time-solar-wind>

## **Space Weather:**

→**NASA Space Weather Action Center:**

<https://sunearthday.nasa.gov/swac/data.php>

→**NOAA Space Weather Prediction Center:**

<https://www.swpc.noaa.gov/>

→**Real-time (Quicklook) Dst index:**

[http://wdc.kugi.kyoto-u.ac.jp/dst\\_realtime/index.html](http://wdc.kugi.kyoto-u.ac.jp/dst_realtime/index.html)

## **News:**

→**spaceweather.com:** <http://spaceweather.com/>



<http://upload.wikimedia.org/wikipedia/commons/4/4b/Lightning3.jpg>



<http://upload.wikimedia.org/wikipedia/commons/a/a9/Polarlicht.jpg>

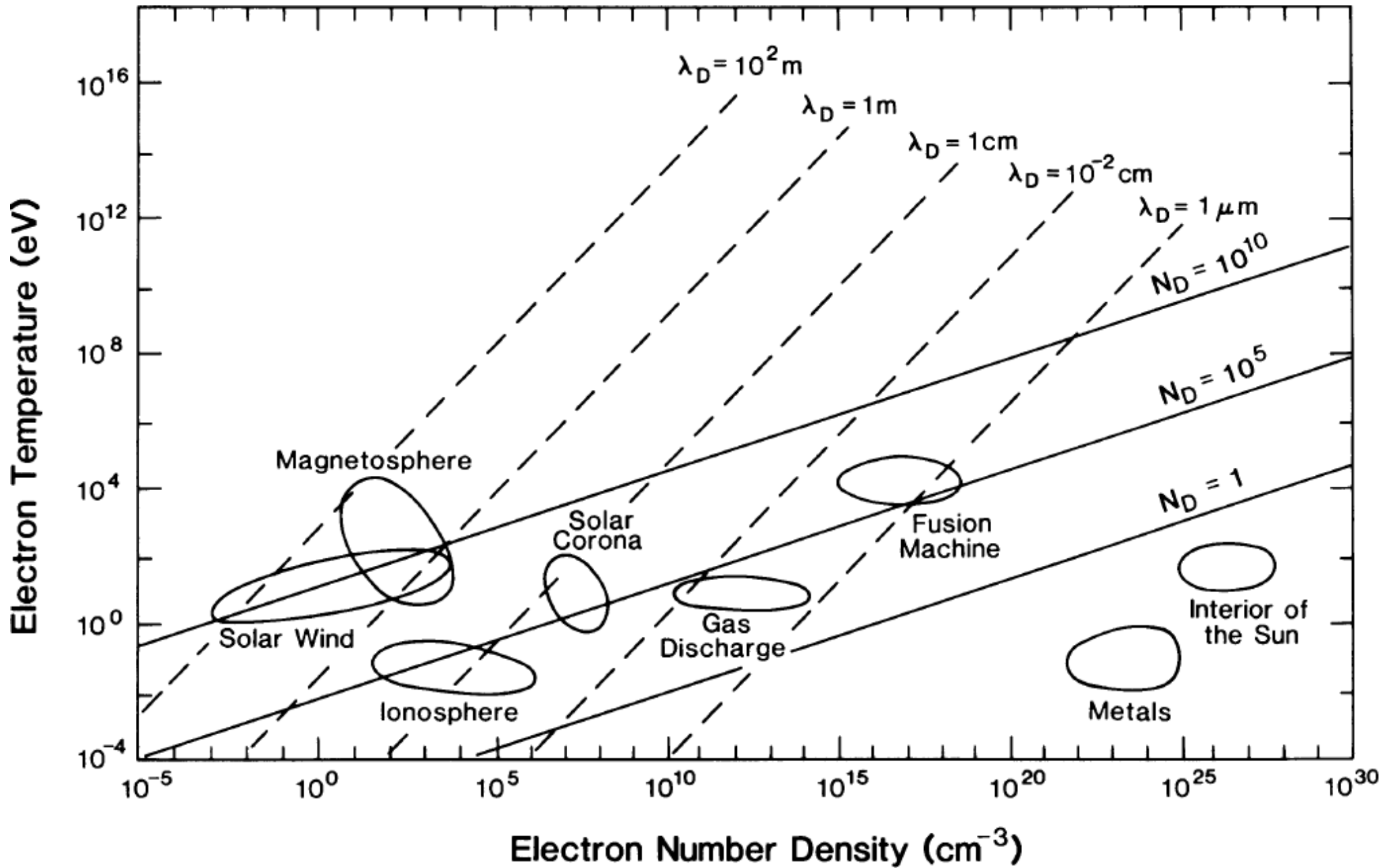


Fig. 2.4 in M. G. Kivelson and C. T. Russell (1995)