

課程網址: <http://www.ss.ncu.edu.tw/~yhyang/111-1/pl.html>

上課方式: 板書(主)+投影片(輔), 18週

評分方式:

作業: 20%

筆試: 60% (三次考試各佔20%), 10/24, 12/5 (TBD),
1/9

上課表現: 20% (5%為值週報告, 15%為三次考試各手
寫一張A4筆記, 考前現場繳交)

隨堂: extra

參考用書：

- 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/

→**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

News:

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

霓虹燈招牌



<http://upload.wikimedia.org/wikipedia/en/2/2a/PikePlaceMarket.jpg>

閃電



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

極光



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

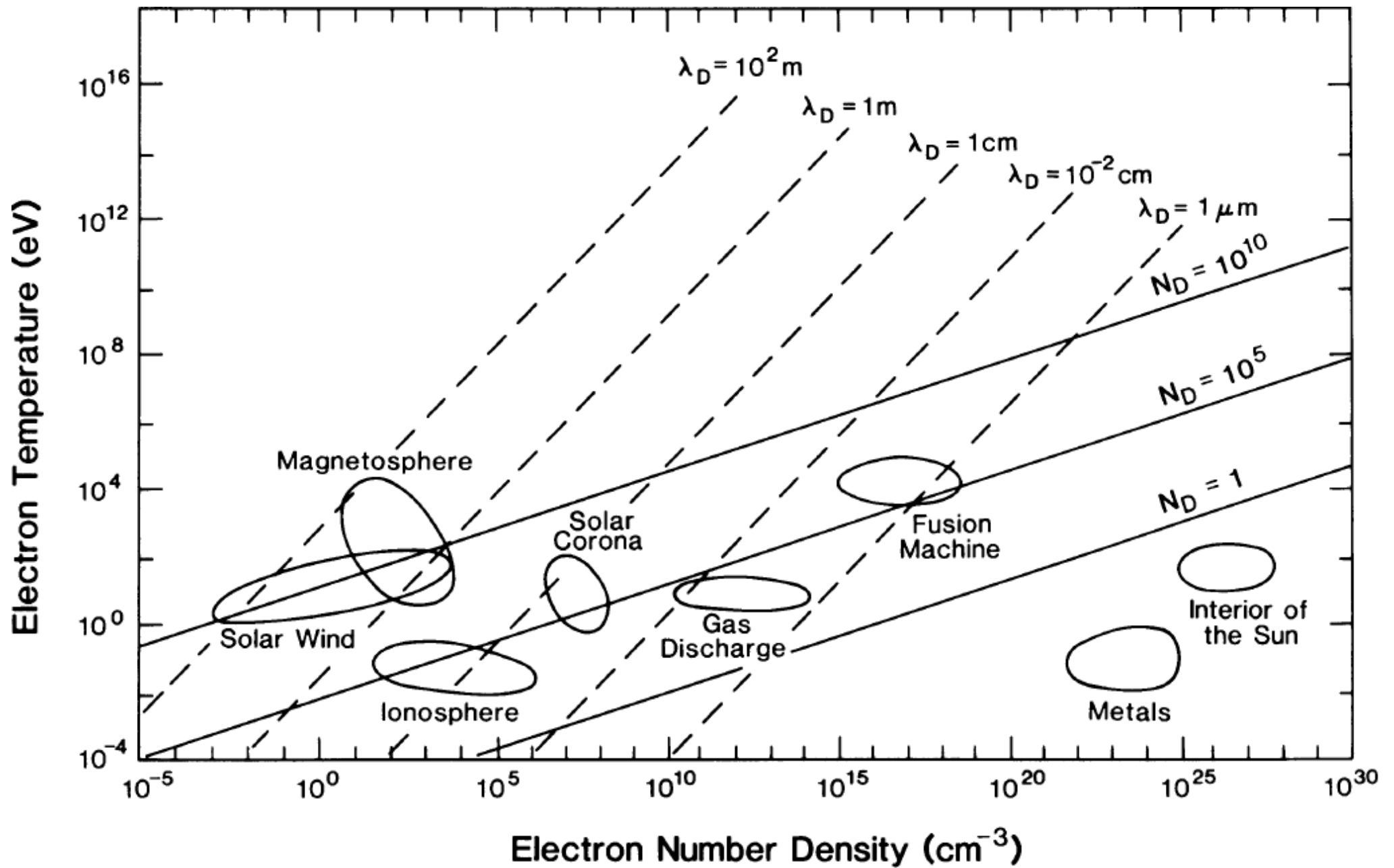


Fig. 2.4 in M. G. Kivelson and C. T. Russell (1995)