### EE 150L

### Signals and Systems Lab

##### Lab6 Laplace Transform

Date Performed: 11.29

Class Id: Thur\_105

##### Name and Student ID:

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1. Please briefly describe the difference and relationship between Laplace transform and Fourier transform.
2. 1. Find out the transfer function H(s).
   2. What is the relationship between H(s) and h(t).
   3. Find out the zero state response with H(s).

提示:

* 系统的传递函数H(s) 是指在零初始条件下系统响应（即输出）与激励（即输入）之比。

即当时：

* 要从微分方程获得系统传递函数，需对微分方程两边进行拉普拉斯变换，同时利用拉普拉斯变换的时域微分性质。