THE UNIVERSITY OF TEXAS AT SAN ANTONIO

EE 5143

LINEAR SYSTEMS AND CONTROL

QUIZ # 2

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**Name**:

Derive the state-space, controllable canonical form for the following system defined by this transfer function:

$$H(s) = \frac{Y(s)}{U(s)} = \frac{2s^3 + 5s^2 - 4s - 3}{s^3 + 7s^2 - 11s + \pi}.$$

You should basically derive the state-space matrices $A, B, C, D$.

**Your Solution:**

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