

Taller: Control Robusto y Estocástico

Tema: Control \mathcal{H}_∞ de información completa

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Ejercicio 01. \mathcal{H}_2

```
clc, clear all, close all
```

Set random seed for reproducibility

```
rng(5, 'twister');
```

Generate a random state-space system and transpose it. This command creates a 4-output, 5-input stable model and then takes its Hermitian conjugate. This operation yields a 5-output, 4-input unstable model

```
P = rss(3, 4, 5)'; % 3 states, 5 inputs, 4 outputs → transposed: 4 inputs, 5  
outputs  
pole(P)           % Confirm that P is unstable. All the poles are in the right  
half-plane.
```

```
ans = 3×1  
2.8712  
0.2183  
0.2566
```