

Tieu de khong dau

ffs gg gf Using SageTeX, one can use Sage to compute things and put them into your L^AT_EX document. For example, there are 156978797223733228787 integer partitions of 1234. You don't need to compute the number yourself, or even cut and paste it from somewhere.

Một hai ba bốn năm

Phương pháp tính kỹ thuật

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Here's some Hello Sage code:

$$f(x) = \exp(x) * \sin(2*x) * \cos(x)$$

The second derivative of f is

$$\frac{d^2}{dx^2} \cos(x) e^x \sin(2x) = 4 \cos(2x) \cos(x) e^x - 4 \cos(x) e^x \sin(2x) - 4 \cos(1) \quad (1)$$

Controller Synthesis có dấu

- Single-Objective Synthesis
State-feedback, Output-feedback
A general framework with illustrations
- Mixed-objective Synthesis
Trouble and Remedy, Mixed synthesis
LMI-regions
- Auxiliary Results
Dualization, Elimination

Controller Synthesis

Have seen several analysis specifications (stability/performance).

All formulated in terms of matrix inequalities.

Try to achieve them by designing a controller.

Example: Mixed Sensitivity Design

In a tracking problem, a major emphasis is laid on shaping the sensitivity (reference to tracking error), under the constraint that the control effort (reference to control) does not peak too much and rolls off at high frequencies. In view of this rough specs, consider which indicates the relevant performance signals.

Example: Mixed Sensitivity Design

Choose a low-pass scalar weighting function w_1 and a constant or high-pass weight w_2 . Define $W_1 = w_1 I$ and $W_2 = w_2 I$ and consider the following interconnection with weighted performance channels:

Then design a controller K which stabilizes this interconnection and minimizes the H_∞ -norm of $d \rightarrow e = \text{col}(e_1, e_2)$.