

The background of the slide is a faded image of the Jiaotong University gate. The gate is a large, white, curved structure with the university's name in English, "JIAOTONG UNIVERSITY", on the right side and in Chinese, "交通大学", on the left side. The gate is flanked by trees and a building with a red roof. A large, dark purple rectangular box is superimposed over the center of the image, containing the text "作业10" in yellow.

作业10

2021-2022学年第2学期

1. (教材236页习题第1题)考虑等式约束优化问题:

$$\begin{aligned} \min \quad & x_1^2 + x_2^2 + x_3^2 \\ \text{s.t.} \quad & x_1 + 2x_2 - x_3 - 4 = 0 \\ & x_1 - x_2 + x_3 + 2 = 0 \end{aligned}$$

用变量消去法, Lagrange方法解决此问题。