

Title of the Presentation

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The University of Tatooine
Institute for Themes and Templates

HELMHOLTZ
RESEARCH FOR GRAND CHALLENGES

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The logo of the Karlsruhe Institute of Technology (KIT) features a stylized green fan-like graphic to the left of the bold black letters 'KIT'.
Karlsruhe Institute of Technology

Outline

1. Bullet Point Section
2. Block Section
3. Formula Section

Enumerations

1 Bullet point 1

- Bullet point 1
- Bullet point 2
- Bullet point 3

2 Bullet point 2

- Bullet point 1
- Bullet point 2
- Bullet point 3

3 Bullet point 3

Blocks

Regular Block

- Bullet point 1
- Bullet point 2

Example Block

- Bullet point 1
- Bullet point 2

Alert Block

- Bullet point 1
- Bullet point 2

Mathematical Slides

We have an **objective function** $f : \mathbb{R}^k \rightarrow \mathbb{R}$

$$\max_x f(x)$$

$[x = (x_1, \dots, x_k)]$ subject to some **constraints** within \mathbb{R}^k :

$$g_i(x) = c_i \quad \leftrightarrow \quad \lambda_i \quad i = 1, \dots, n$$

$$h_j(x) \leq d_j \quad \leftrightarrow \quad \mu_j \quad j = 1, \dots, m$$

λ_i and μ_j are the **KKT multipliers** (basically Lagrange multipliers) we introduce for each constraint equation; it measures the change in the objective value of the optimal solution obtained by relaxing the constraint (shadow price).