AI in the Sciences and Engineering **2024**

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Project 1 Due date: Friday 12 April 2024, 23:59 (midnight)

The main objective of the project is to apply machine learning algorithms to solve various tasks related to the preliminary design of a thermal energy storage. The project is divided into four tasks, the solution of each of which is described in detail below.

1. **Task 1: PINNs for solving PDEs**

2. **Task 2: PDE-Constrained Inverse Problem**

3. **Task 3: Applied Regression**

4. **Task 4 - Robustness of PINNs and Transferability (Optional)**