# A Hands-on Introduction to Geometric Deep Learning, with Examples in PyTorch Geometric - II

Machine Learning and Dynamical Systems Seminar
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# Introduction
## About us

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# Introduction
## Organization and material

Tutorial in four parts (slides + Jupyter notebooks available):

- **Part I:** November 2, Presenter: **GS**
  Goals:    Motivations, Intro of basic concepts, definition of GNNs

- **Part II:** November 9, Presenter: **AL**
  Goals:    Implementation of GNNs: How to implement a full GNN pipeline in PyTorch Geometric.

- **Part III:** November 16, Presenter: **SA**
  Goals:    Explainability of GNNs: How to inspect a model to try to understand the learned decision pattern.

- **Part IV:** November 23, Presenter: **FF**
  Goals:    Heterogeneity in GNNs: How can GNNs effectively model and incorporate a diversity of nodes and edges with different types.
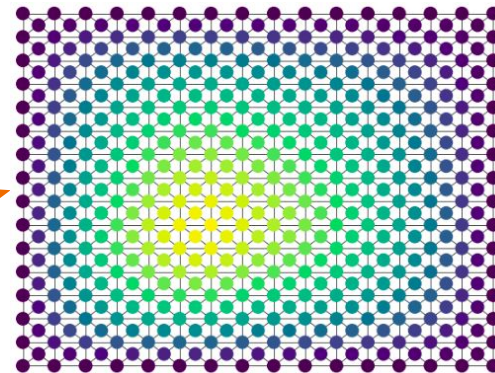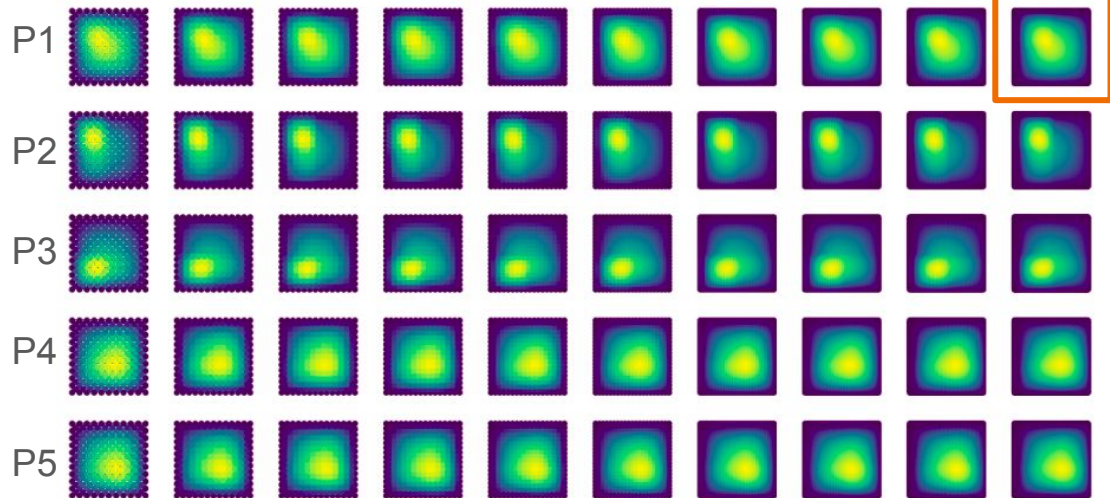
# Program

- Node classification
    - Model 1
    - Model 2
- Graph Classification
    - DataLoader object
- Real world example
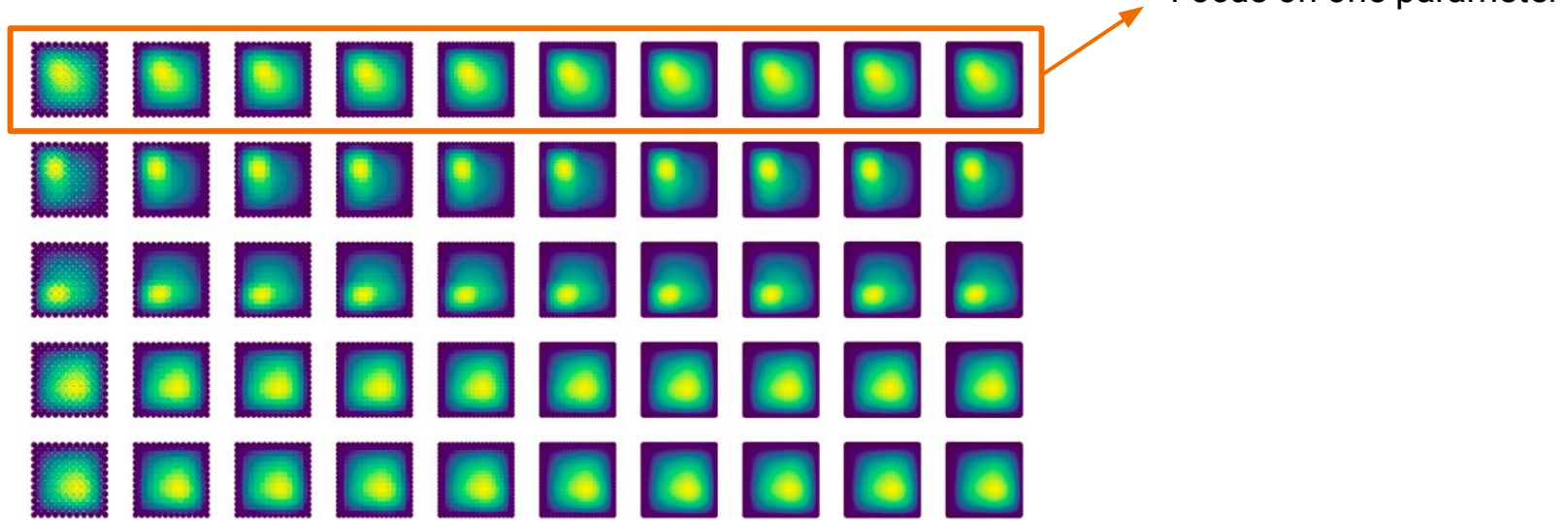    - Other models (Graph Sage, GAT, Cheb, GIN)

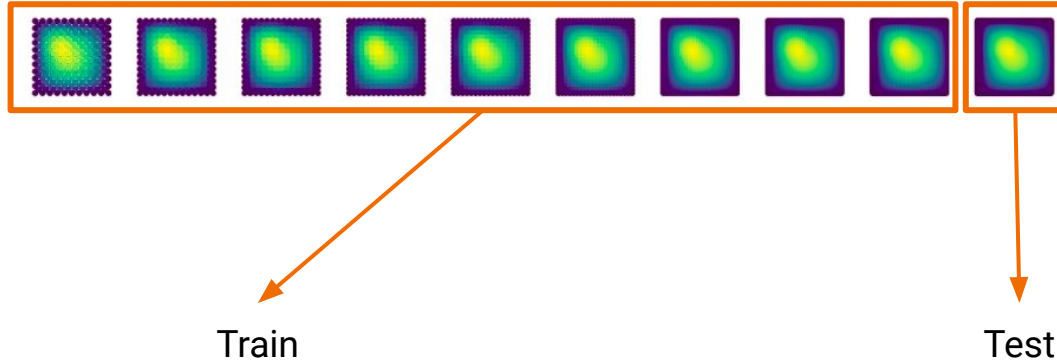# Program
## Real world example

Resolution

# Program
## Real world example

Focus on one parameter

# Program
## Real world example



Train

Test

# LOG conference Italian Meetup



Learning on Graphs Conference 2023

Italy Meetup - Trento

Official page of the Trento meetup of the Learning on Graph Conference, an annual research conference that covers areas broadly related to **machine learning on graphs** and **geometry**.

The event is free to attend, open to everybody and serves as a local branch of the main conference, providing an environment for researchers in this field to convene and foster social connections. Check out the Attend Section for more information.

📅 27th – 30th November 2023 - 📍 Trento

Link: https://sites.google.com/view/log-meetup-italy/

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