BEST PAPER 1
Princeton + Polish collaborators
1. 1000 Layer Networks for Self-Supervised RL: Scaling Depth Can Enable New Goal-Reaching Capabilities https://neurips.cc/virtual/2025/loc/san-diego/poster/115731 + https://openreview.net/forum?id=s0JVsx3bx1 + https://wang-kevin3290.github.io/scaling-crl/

BEST PAPER RUNNER UP 1
Kent State + Purdue + Technion
2. Optimal Mistake Bounds for Transductive Online Learning
https://neurips.cc/virtual/2025/loc/san-diego/poster/119098 +
https://openreview.net/forum?id=EoebmBe9fG +
https://neurips.cc/media/neurips-2025/Slides/119098.pdf

BEST PAPER RUNNER UP 2
MIT
3. Superposition Yields Robust Neural Scaling
https://neurips.cc/virtual/2025/loc/san-diego/poster/116346 +
https://openreview.net/pdf?id=knPz7gtjPW + https://github.com/liuyz0/SuperpositionScaling +
https://neurips.cc/media/neurips-2025/Slides/116346.pdf +
https://neurips.cc/media/PosterPDFs/NeurIPS%202025/116346.png?t=1764083293.6201491

BEST PAPER 2
MIT + Stanford + Edinburgh + Tsinghua + Alibaba
4. Gated Attention for Large Language Models: Non-linearity, Sparsity, and Attention-Sink-Free
https://neurips.cc/virtual/2025/loc/san-diego/poster/120216 +
https://openreview.net/pdf?id=1b7whO4SfY

BEST PAPER 3
French Universities
5. Why Diffusion Models Don’t Memorize: The Role of Implicit Dynamical Regularization in Training https://neurips.cc/virtual/2025/loc/san-diego/poster/119372 +
https://openreview.net/pdf?id=BSZqpqgqM0 +
https://neurips.cc/media/PosterPDFs/NeurIPS%202025/119372.png?t=1764431118.9371638

BEST PAPER (Datasets and Benchmark)
CMU, University of Washington, Stanford, Lila Sciences
6. Artificial Hivemind: The Open-Ended Homogeneity of Language Models (and Beyond)
https://neurips.cc/virtual/2025/loc/san-diego/poster/121421 + Dataset URL:
https://huggingface.co/datasets/liweijiang/infinite-chats-taxonomy Code URL:
https://github.com/liweijiang/artificial-hiveminds

BEST PAPER 4
Tsinghua and SJTU

7. Does Reinforcement Learning Really Incentivize Reasoning Capacity in LLMs Beyond the Base Model? https://neurips.cc/virtual/2025/loc/san-diego/poster/119944 + https://openreview.net/forum?id=4OsgYD7em5 + https://limit-of-rlvr.github.io/