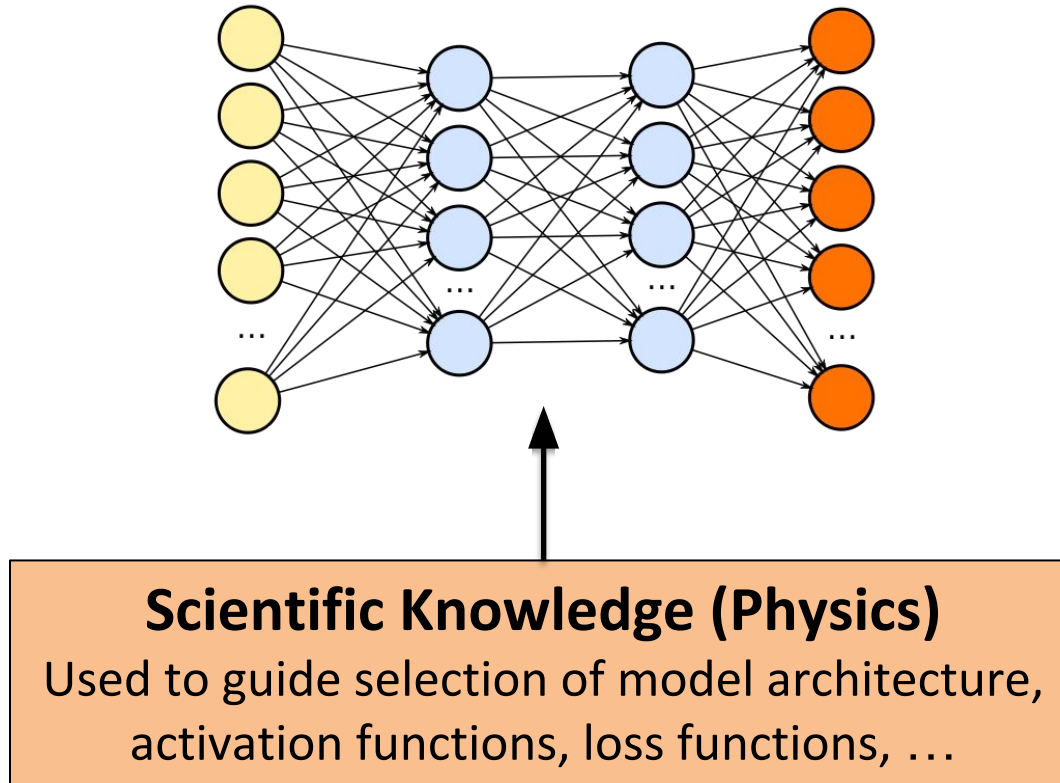# Physics-Guided Neural Networks (PGNN)

A Framework for Learning **Physically Consistent** Deep Learning Models

Scientific Knowledge (Physics)
Used to guide selection of model architecture,
activation functions, loss functions, …

Karpatne et al., "Physics-guided neural networks (PGNN):
Application in Lake Temperature Modeling," SDM 2018 (in review; **arXiv: 1710.11431**).