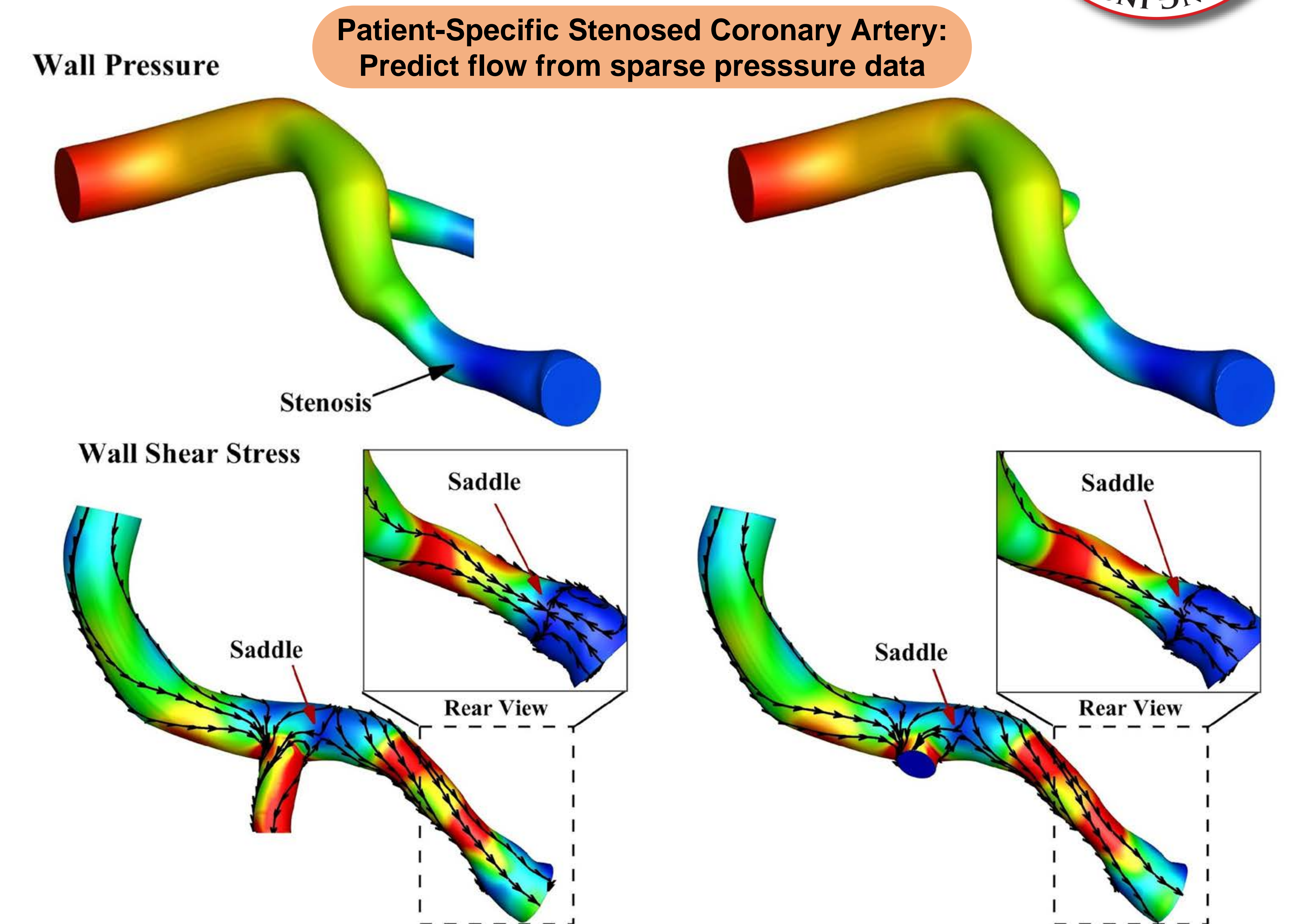
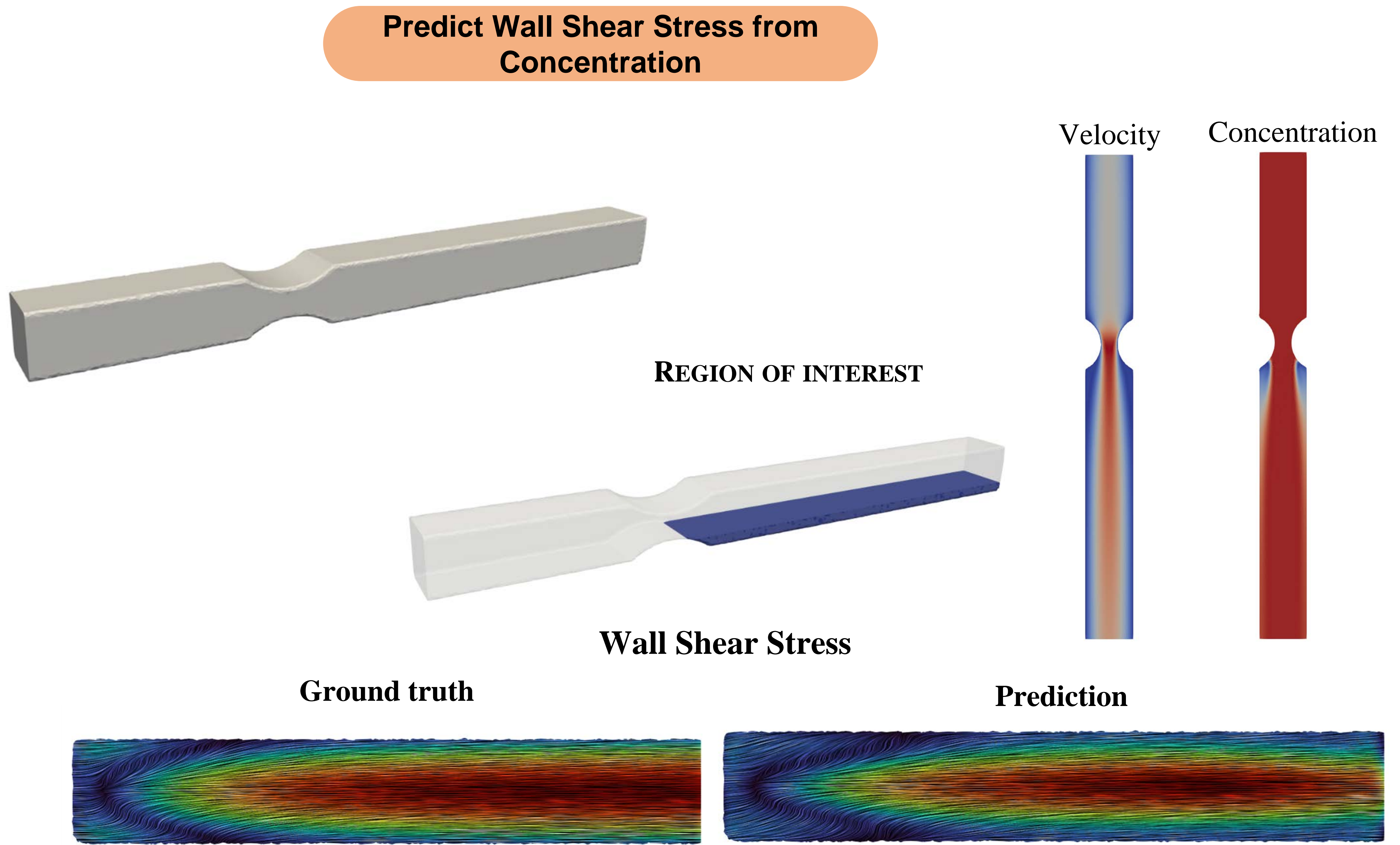


# Physics Informed Neural Networks (PINNs) in Cardiovascular Flows

Computational Biomechanics Group (PI: Amir Arzani)

bio.mech.utah.edu

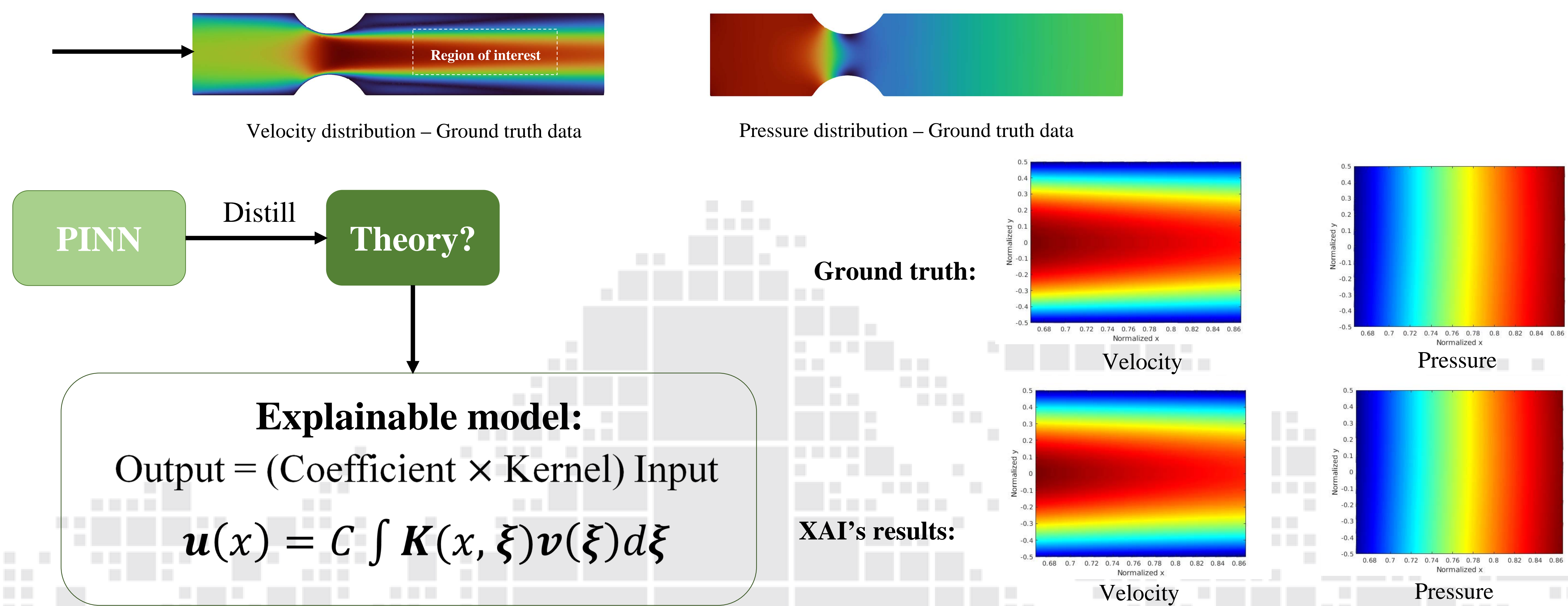
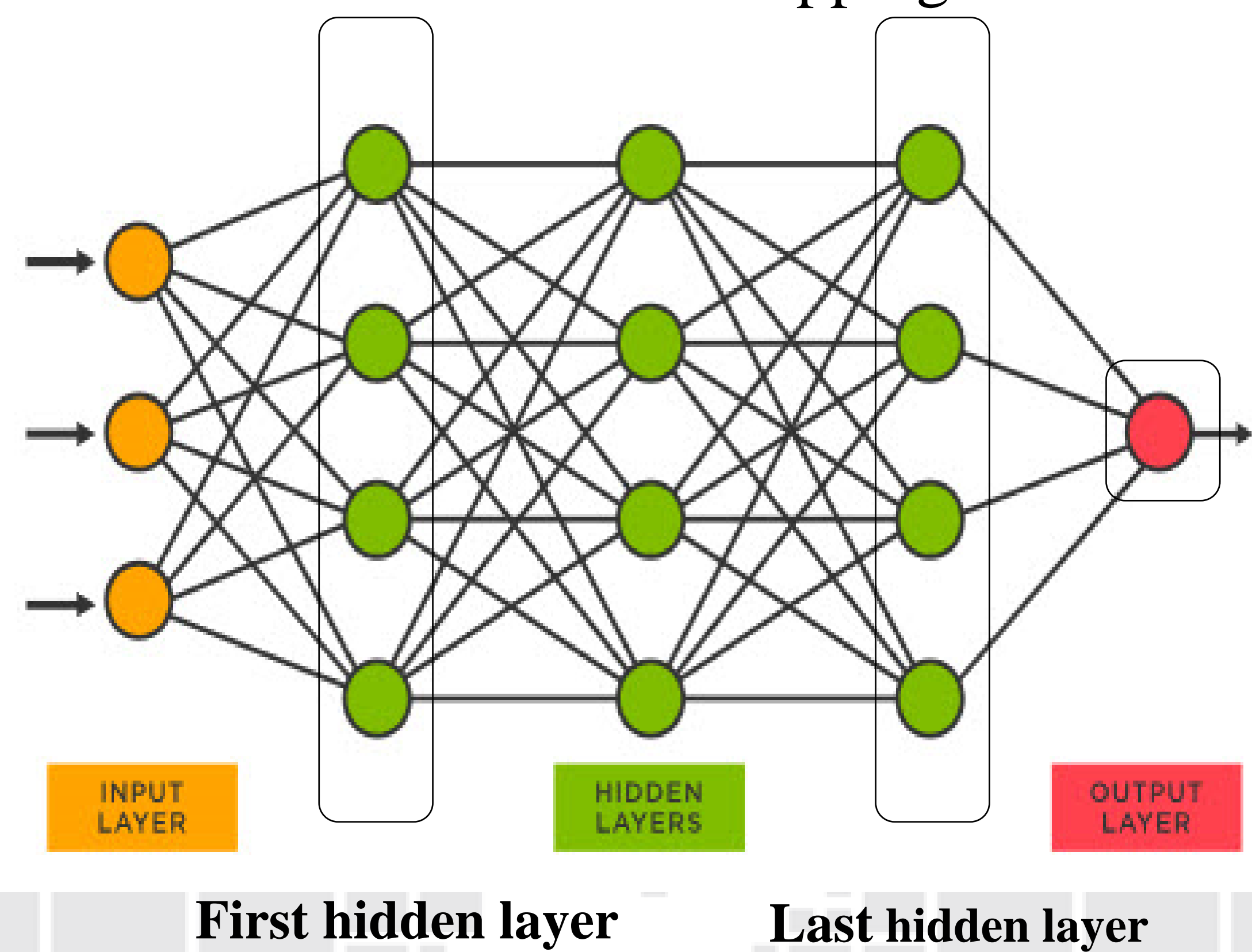
Mahmoud Elhadidy, Mojgan Alishiri, Siva Viknesh



## Interpretation of PINN (XAI)

Interpretable Operator learning

- Function to scalar mapping
- Function to function mapping



**Explainable model:**

Output = (Coefficient × Kernel) Input

$$u(x) = C \int K(x, \xi) v(\xi) d\xi$$