Mission
To foster a dynamic forum for exchanging ideas, data, methods, and models related to ML techniques for fluid dynamics, turbulence, and combustion - fields crucial to the development of energy, propulsion, climate, and safety systems.

Agenda
1. A 10-day-long ML challenge (involving 1-2 person(s) per team) will be held to tackle generative modeling in fluid dynamics/turbulence with open-source data.
   - Prize: GPU credits, and leading teams will be invited towards a joint publication.
2. 10 one-hour-long lectures (one lecture per day) on cutting-edge trends will be given by leading AI/ML experts within Stanford, academic guests, and industrial partners from the Greater Silicon Valley ecosystem and beyond. Topics include:
   - **Fundamentals of data-driven tools**
   - Classification vs. Regression. Open-source ML libraries (Torch, Tensorflow) and platforms (Kaggle). Best practices for training models.
   - **Generative Machine Learning**
   - **Physics-informed Machine Learning**
   - Physics informed-loss and architecture. Data-centric vs. model-centric vs. knowledge-centric.

Eligibility Criteria
We invite Computational, Fluid-dynamics, Combustion, or AI/ML researchers worldwide to join us at this virtual workshop. **Attendance is free.** Sign up at [https://flame-ai-workshop.github.io](https://flame-ai-workshop.github.io) for future info on the technical program.