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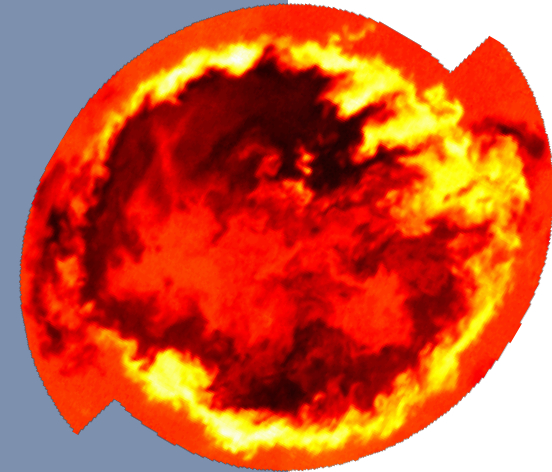
- What is the effect of fuel/air mixing quality on NOx emissions?
- How much information can be gained from non-reacting investigations?
- How can the mixing process be modeled to control the fuel distribution in an atmospheric combustor?
- How does the fuel distribution affect the stability of a premixed combustor?
- What is the impact of fuel modulation on the mixing quality?
- Are fluidic actuators effective in improving the mixing quality?

... are some of the questions investigated in this thesis, which are of relevance to scientists who intend to get further insight of the combustion process and the underlying fluid dynamics.

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