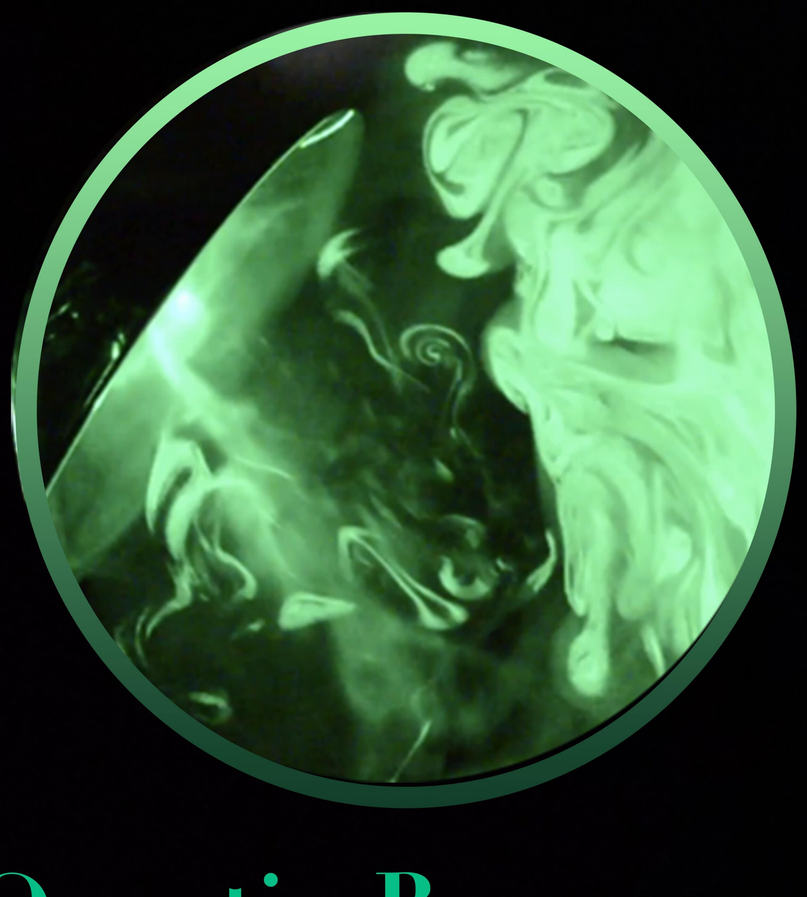
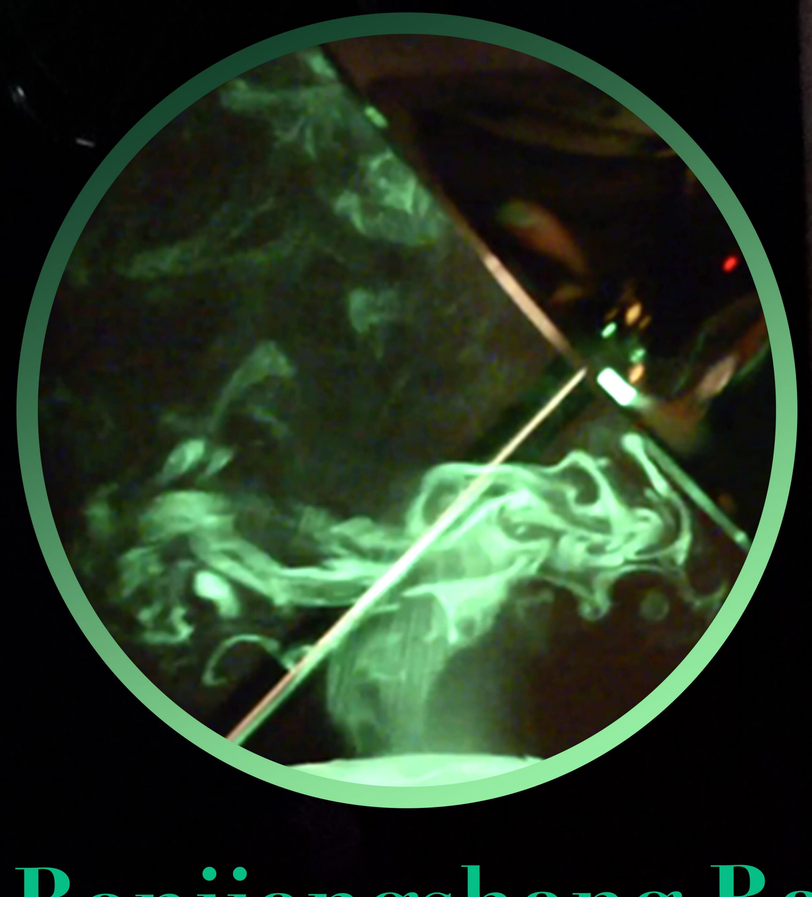
A Fluid Mechanics Guide to the Orchestra

In a music ensemble, the use of wind instruments poses a potential risk for the transmission of the COVID-19 virus.Our team at The University of Pennsylvania School of Engineering, collaborated together with members of the Philadelphia Orchestra to characterize the flow structures and the aerosol production from the several openings of brass and woodwind instruments.

During the data collection, the reflections of a green laser on an artificial fog and on the instruments walls created these mesmerizing ensembles of light and jets dancing together.





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