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Abstract for an Invited Paper
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Otto Laport Lecture: A Fascination with Fluids: Vortices and Vortex Breakdown.

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The problem of the dynamics of long slender vortices, e.g., tornadoes, dust devils, waterspouts, fire whirls, internal flow in rotating machinery, leading edge and trailing vortices on lifting surfaces, etc, has been a fascination for me for close to 50 years. A sequence of experimental studies will be presented, together with reasoned physical explanations and related theoretical arguments, that attempt to bring some order to the sometimes-controversial discussion that has swirled about the subject during that time.