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**Simulating Underwater Leader Growth** LEE CULVER, GARY HUNTER, JAMES ESPINOSA, University of West Georgia — Dielectric breakdown in water is always preceded by the growth of leaders. The structure and growth of these leaders have been previously simulated with fractals; however, present mathematical models are rife with undesired parameters. We eliminate many of these parameters with a physical model that describes a leader as a protonic mobility wave. Graphical-simulation results will be presented and compared with photographic data.

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