## Abstract Submitted for the DFD16 Meeting of The American Physical Society

The making of a cavitation childrens book<sup>1</sup> MARC HENRY DE FRAHAN, BRANDON PATTERSON<sup>2</sup>, ERIKA LAZAR, Univ of Michigan - Ann Arbor — Engaging young children in science is particularly important to future scientific endeavors. From thunderstorms to the waterpark, children are constantly exposed to the wonders of fluid dynamics. Among fluid phenomena, bubbles have always fascinated children. Yet some of the most exciting aspects of bubbles, such as cavitation, are scarcely known to non-experts. To introduce cavitation to a five year old audience, we wrote Brooke Bubble Breaks Things, a childrens book about the adventures of a cavitation bubble learning about all the things she could break. In this talk, we discuss how a childrens book is made by walking through the steps involved in creating the book from concept to publication. We focus on strategies for successfully communicating a technical message while balancing entertainment and fidelity to nature. To provide parents, teachers, and young inquiring minds with a detailed explanation of the physics and applications of cavitation, we also created a website with detailed explanations, animations, and links to further information. We aim to convince the fluids community that writing picture books is an intellectually stimulating and fun way of communicating fluids principles and applications to children.

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Date submitted: 03 Aug 2016 Electronic form version 1.4

<sup>&</sup>lt;sup>1</sup>ArtsEngine Microgrant at the University of Michigan

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