

Abstract Submitted
for the APR14 Meeting of
The American Physical Society

The White Noise Generator programed on the Raspberry Pi¹
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KUZELL, Georgia College and State University — A Raspberry Pi computer, run-
ning a Linux based operating system, was programmed for use as a white noise
generator. The program was written to output sine waves at a specific frequency
with a randomly generated phase. This function generator was programmed specif-
ically for an ongoing undergraduate research project. This research project involves
the calculation of the speed of flow through a cylindrical pipe with 128 transducers
equally spaced by 0.4 inches down the length of the pipe. The inputted white noise
generated serves as an effective technique to induce multiple sine waves of a given
frequency to the pipe, as the sine waves are generated at a random phase.

¹Our research group would like to thank Dr. Ken McGill for all of his help, guidance,
and time with this research project. We would also like to thank Georgia College
and State University for providing the materials used in this experiment.

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Date submitted: 09 Jan 2014

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