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**Does it matter if I exercise? What can "cardiophysics" tell us?**<sup>1</sup> GUS HART, BENJAMIN WILSON, ALLEN PARCELL, Brigham Young University — Lower heart rates are often associated with better cardiovascular health. But there's a lot more to cardiac rhythms than just the average heart rate. Fractal analysis of inter-beat intervals shows a surprising ability to discriminate between healthy and unhealthy, young and old groups. Are the fluctuations in the heartbeat of a healthy heart random, small, periodic, or chaotic? Does exercise make a difference? We discuss our analysis of the cardiac data of two groups of individuals, those that were physically active and those that were sedentary.

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