

Abstract Submitted  
for the 4CF10 Meeting of  
The American Physical Society

**ECG Preferred Segment Enhancement using Correlation Methods** DANIEL BLAKLEY, Brigham Young University — Clinical quality electrocardiograms are comprised using up to 12 differential leads, placed at predefined locations on the human body. From these, a clinician chooses the best lead set to view preferred segments of the cardiac waveforms from the possible options. A new approach is proposed for better clarity using correlation methods from computed orthogonal lead sets to enable a virtual orthogonal lead set and its transformation to a preferred waveform which maximizes the preferred segment amplitude using its virtual leads.

Daniel Blakley  
Brigham Young University

Date submitted: 13 Sep 2010

Electronic form version 1.4