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**SESSION 16: Cryocooler Applications and  
Integration**

Paper 16.7

Thursday ORAL Session

2:30 PM

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***Magnet Spring Assisted Tuned  
Dynamic Absorber for Low-SWAP  
Stirling Cryocooler***

*A. Veprik, V. Babitsky, R. Refaeli, S. Kurucz, L. Bunin,  
CryoTech BV, Israel*

The vibration export resulting from the motion of piston and displacer assemblies within Stirling linear cryocoolers can pose significant challenges, especially in the context of long-range, high-resolution, and low Size, Weight, and Power handheld and gyro-stabilized cooled high operating temperature infrared imagers.

CryoTech has introduced an innovative and cost-effective micro-miniature split Stirling cryocooler comprised of a single-piston compressor and a pneumatic expander, where the vibration concerns were effectively addressed by minimizing the weight of the moving assemblies and using an optional Tuned Dynamic Counterbalancer featuring magnetic spring.