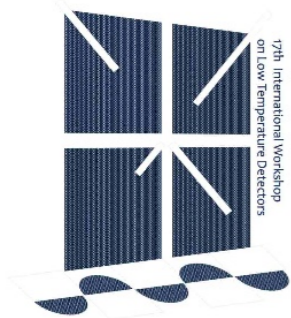


# Vibration measurement and mitigation for cryogen- free dilution refrigerator

Chang Lee

17<sup>th</sup> international workshop  
on Low Temperature Detectors  
July 2017, Kurume, Fukuoka, Japan

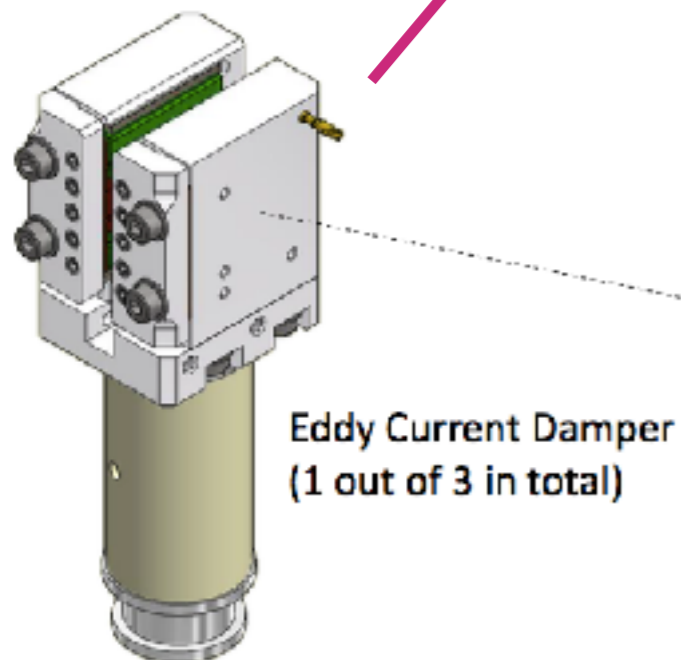
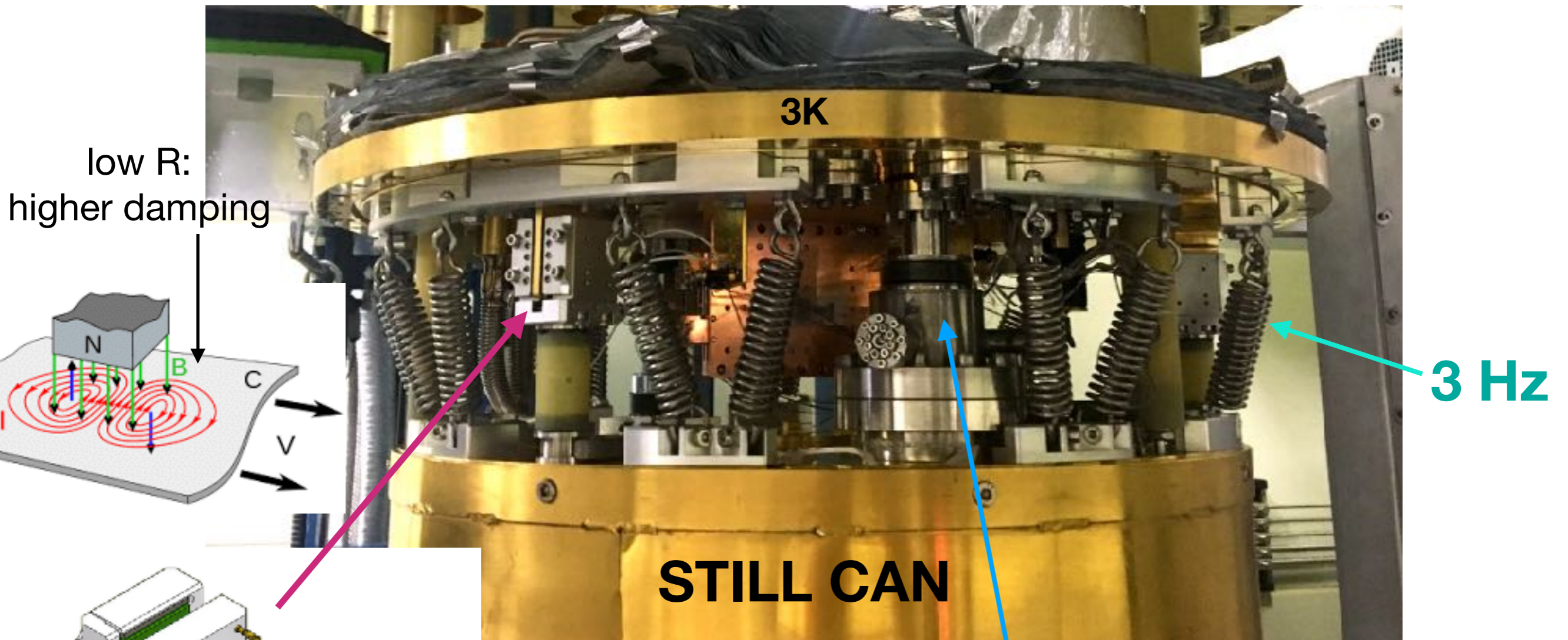


LTD17

July 17-21, 2017  
Kurume, Fukuoka, Japan

**ibs** Institute for Basic Science

# Spring-suspended still



original: **Rev. Sci. Instrum. 85 (2014) 035112.**  
Design, fab, & installation by **Leiden Spin Imaging**

# SSS results

Geophone on **still plate**  
 Temperature: ~4K

vertical  $a_{rms}$  reduced by 3.9

rms mm/sec <sup>2</sup> (1-1000 Hz)	horizontal	vertical
rigid	5.6	21
SSS @ 4K	N/A	5.4
PTR off	0.6	0.6

