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## Occurrence of thermoacoustic phenomena at 0.8 K, 4 K and above

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Thermoacoustics in cryogenics continues to be a very interesting phenomenon which is still poorly understood but often experienced unexpectedly in experiments where it causes unacceptable heat leaks. The authors report on the appearance and onset of this unwanted occurrence at temperatures below 1 K. Based on experiments, quantitative measurements of the heat leak caused by these pressure oscillations in bent tubes with 4.55 and 4.7 mm inner diameter with heat stationing links are presented. Parameters most likely affecting the magnitude of these thermoacoustic oscillations are studied and means of avoiding them are given. Furthermore, we had the rare opportunity to record and analyze 4 K TAOs experienced on a test setup and present simple means of avoiding them.

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