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**Vortex Shedding Dynamics in the Wake of Slender Cones at Low Reynolds Numbers** PETER MONKEWITZ[1], EPFL, Switzerland, MICHEL PROVANSAL, IRPHE, France — Since the original work of Gaster, the Kármán vortex shedding from slender cones placed normal to an oncoming uniform flow has been thought to lead to a series of stationary cells along the cone span, separated by zones of dislocations, with constant shedding frequency within each cell. Experiments on two cones with taper ratios of 3.2 $10^{-3}$ and 6.7 $10^{-3}$ are reported for local Reynolds numbers ranging between 40 and 180. By visualizing the plan view of the wake with hydrogen bubbles and determining local "instantaneous" frequencies, wave lengths and shedding angles from a digital movie, it is shown that shedding cells do appear but consistently move towards the thin end of the cone. An attempt is made to correlate this spanwise cell velocity with the speed of "hole-solitons" in the spanwise Ginzburg-Landau equation. Finally, it is shown why the data processing employed in previous studies can make moving cells look stationary.

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Peter Monkewitz
LMF-EPFL

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