Sky dancer: an intermittent system

ANNE CROS, JESSE ALEXANDER RODRÍGUEZ ROMERO, OSCAR DAMIÁN DÍAZ ANDRADE, Universidad de Guadalajara — Sky dancers attract people sight to make advertising. What is the origin of those large vertical tubes fluctuations above an air blower? This study complements the previous one [1] about the system analysis from a dynamical system point of view. As a difference from the “garden hose-instability” [2], the tube shape has got “break points”. Those “break points” separate the air-filled bottom tube portion from its deflated top portion. We record the tube dynamics with a high-speed videocamera simultaneously that we measure the pressure at the air blower exit. The intermittent pressure evolution displays picks when the tube fluctuates.