# Stability analysis of a human balancing model with different feedback delays

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Considering that sensory information (position, velocity and acceleration) utilized during human balancing is associated with different conducting and processing delays, a model for human balancing with proportional-derivative-acceleration (PDA) feedback are analyzed in which the reaction delay for acceleration signals is half of the reaction delay for position and velocity signals. The stability charts are presented and compared with the results when the same feedback delay is considered.