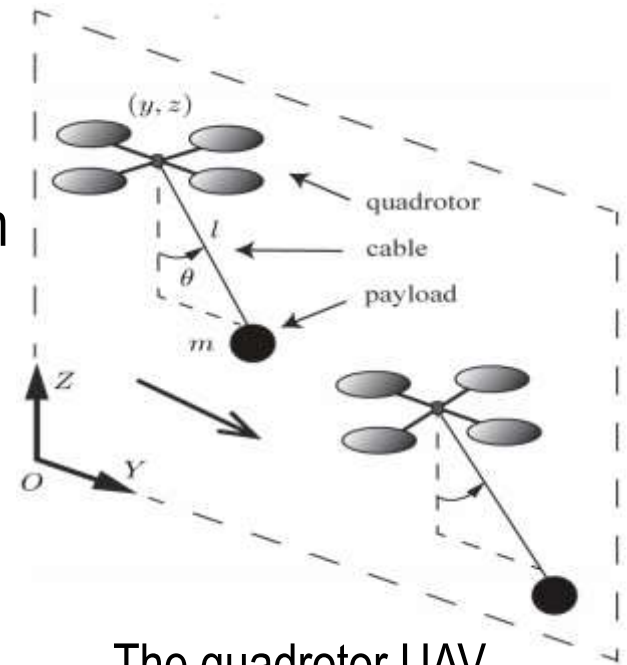


# Adaptive Neural Network Control of Quadrotor Unmanned Aerial Vehicle Transportation Systems

Xiao Liang, Zhuang Zhang, Hai Yu, Yang Wang, Ning Sun

Institute of Robotics and Automatic Information Systems, College of Artificial Intelligence, Tianjin Key Laboratory of Intelligent Robotics, Nankai University, Tianjin 300350, China

- An adaptive controller is proposed based on sliding manifolds and RBFNNs.
- RBFNNs are utilized to compensate for system uncertainties/disturbances.
- The stability of the system can be guaranteed by Lyapunov techniques.
- Simulation results show superior performance and robustness of the proposed adaptive NN controller



The quadrotor UAV transportation system