

# **Abstract**

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## **Sensorless PM Motor with Multi Degree of Freedom Fuzzy Control**

This paper introduces application of multi degree of freedom fuzzy (MDOFF) controller in permanent magnet (PM) drive system. The drive system model is developed for FO control. Simulation of the system is carried out to predict the performance at NL and under load,. The results indicate that application of MDOFF controller is effective for sensorless PM drive system. Keywords—Sensorless FO controller, PM drives system, MDOFF controller.