

# Report Title

## 1 Introduction

Generalized Maxwell Slip (GMS) model [1] with Friction force  $F_f$  equation:

$$F_f(t) = \sum_{i=1}^N F_i(t) + \sigma_2 v(t) \quad (1)$$

State equations:

$$\frac{dF_i}{dt} = \text{sgn}(v)C \left( \alpha_i - \frac{F_i}{s(v)} \right) \quad (2)$$

## References

- [1] F. Al-Bender, V. Lampaert, and J. Swevers, “The generalized maxwell-slip model: a novel model for friction simulation and compensation,” *IEEE Trans. Automat. Contr.*, vol. 50, pp. 1883–1887, Nov. 2005.