Title: Exponential stability of switched stochastic delay systems with **non-linear uncertainties**

Abstract: This article considers the robust **exponential stability** of uncertain switched stochastic systems with time-delay. Both almost sure (sample) stability and stability in mean square are investigated. Based on Lyapunov functional methods and **linear matrix inequality** techniques, new criteria for exponential robust stability of switched stochastic delay systems with **non-linear uncertainties** are derived in terms of linear matrix inequalities and **average dwell-time** conditions. Numerical examples are also given to illustrate the results.

(a) Present Keyphrases

Target: {stochastic systems; non-linear uncertainties; exponential stability; linear matrix inequality; average dwell-time}

CopyRNN: 1. **linear matrix inequality**, 2. switched stochastic systems, 3. robust stability, 4. **exponential stability**, 5. **average dwell-time**

TG-Net: 1. **exponential stability**, 2. switched stochastic systems, 3. **average dwell-time**, 4. **non-linear uncertainties**, 5. **linear matrix inequality**

(b) Absent Keyphrases

Target: {switched systems; time-delay system}

CopyRNN: 1. **switched systems**, 2. switched delay systems, 3. robust control, 4. uncertain systems, 5. switched stochastic stochastic systems

TG-Net: 1. almost sure stability, 2. **switched systems**, 3. **time-delay systems**, 4. mean square stability, 5. uncertain systems