

ABBREVIATIONS

| Term | Description |
|----------------|--|
| DISO | Double-input, single-out |
| FE | Finite element |
| FL CONTROLLER | Fuzzy logic controller |
| LQR CONTROLLER | Linear-quadratic-regulator controller |
| MIMO | Multi input multi output |
| MOM | Middle of Maximum |
| MV | manipulated variable |
| NB | Negative big |
| NM | Negative medium |
| NS | Negative small |
| PB | Positive big |
| PDVF | Polyvinylidene fluoride |
| PI | Performance index |
| PID CONTROLLER | Proportional -integral-derivative controller |
| PM | Positive medium |
| POF | Proportional output feedback |
| PS | Positive small |
| PZT | Lead zirconate titanate patches |
| RTOS | real time operation system |
| rlocus | root locus |
| SISO | Single input single output |
| SVFB | State-variable feedback |
| ZO | Zero |