

ADMISSIBLE INITIAL VALUES AND HISTORIES FOR A CLASS OF EVOLUTIONARY EQUATIONS

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ABSTRACT

Within the framework of evolutionary equations we provide a way to incorporate initial value problems or, more generally, problems with prescribed history. The given initial data/history will enter the equation as a distributional right hand side. The main problem is to determine those data, which allow for a continuous solution. We define a space of admissible histories which allows us to associate a strongly continuous semigroup with the given evolutionary problem.

REFERENCES

- [1] S. Trostorff, Exponential Stability and Initial Value Problems for Evolutionary Equations. Habilitation Thesis, TU Dresden, 2018, url: <http://nbn-resolving.de/urn:nbn:de:bsz:14-qucosa-236494>