

MATEMATIČNI KOLOKVIJI

Stochastic stability and sensitivity

Matija Vidmar

Fakulteta za matematiko in fiziko UL

Perturbing independent parts of a stochastic object in a continuous fashion, its observables (the random variables pertaining to the object) are affected to varying degree in mean-square error. As the perturbation becomes smaller and smaller, for any given observable, this error either disappears - and then the observable is called stable - or it does not, in which case, if moreover the perturbed version becomes uncorrelated to the original, the observable is said to be sensitive. Some systems are classical in that all its random variables are stable. Others are nonclassical: some of its observables are stable, but some are not. The case when all the zero-mean random variables are sensitive can also occur. We will look at this at an elementary level, on toy examples involving that most forgiving of all probabilistic ingredients: fair coin tosses.



Univerza v Ljubljani
Fakulteta za *matematiko in fiziko*



Četrtek, 1. junij 2023, 15:15

Fakulteta za matematiko in fiziko
Jadranska 21, predavalnica 2.02

Vabljeni vsi prijatelji matematike.
Predavanju sledi druženje ob prigrizkih.