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On large deviations for occupations measures related with a Markov class with compact metric state space

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Abstract - Fundamental classical techniques, which provided naturally representations of the rate function in the large deviations principle (LDP) for occupations measures related with a Markov class with a finite state set, are considered.

Sufficient conditions concerning the compactness and the largest eingenvalues of the operators used in calculations are given, in order to make the techniques applicable also in the case of a general, compact, metric state space.

Key words and phrases : large deviations principle, rate function entering into a large deviation principle, quasicompact operator

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