

A moderate deviation principle for empirical bootstrap measure

Mikhail Ermakov

(Submitted on 7 Jun 2012)

We establish two moderate deviation principles (MDP) in the bootstrap setting. We prove MDP for the joint distribution of the empirical measure and the empirical bootstrap measure (empirical measure obtained by the bootstrap procedure). We derive MDP for the conditional distribution of the empirical bootstrap measure given the empirical probability measure. For most common statistical functionals (in particular differentiable and homogeneous functionals) we show that their asymptotics of moderate deviation probabilities in the cases of empirical measure and bootstrap empirical bootstrap measure coincides. However the moderate deviation zones are different.

Subjects: **Statistics Theory (math.ST)**
MSC classes: 60F10, 62F40, 62G09, 62G30
Cite as: **arXiv:1206.1459 [math.ST]**
(or **arXiv:1206.1459v1 [math.ST]** for this version)

Submission history

From: Mikhail Ermakov s [view email]
[v1] Thu, 7 Jun 2012 11:55:27 GMT (24kb)

[Which authors of this paper are endorsers?](#)

Link back to: [arXiv](#), [form interface](#), [contact](#).

Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

math.ST

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1206](#)

Change to browse by:

[math](#)
[stat](#)

References & Citations

- [NASA ADS](#)

Bookmark (what is this?)

