

## Mathematical Physics

# Asymptotic mean density of sub-unitary ensemble

E. Bogomolny

(Submitted on 30 Dec 2009)

The large  $N$  limit of mean spectral density for the ensemble of  $N \times N$  sub-unitary matrices derived by Wei and Fyodorov (J. Phys. A: Math. Theor. 41 (2008) 50201) is calculated by a modification of the saddle point method. It is shown that the result coincides with the one obtained within the free probability theory by Haagerup and Larsen (J. Funct. Anal. 176 (2000) 331).

Subjects: **Mathematical Physics (math-ph)**; Chaotic Dynamics (nlin.CD)

Cite as: [arXiv:0912.5444v1](#) [math-ph]

## Submission history

From: Eugene Bogomolny [[view email](#)]

[v1] Wed, 30 Dec 2009 10:45:29 GMT (7kb)

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

## Download:

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

Current browse context:

**math-ph**

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

[new](#) | [recent](#) | [0912](#)

Change to browse by:

[math](#)

[nlin](#)

[nlin.CD](#)

## References & Citations

- [CiteBase](#)

## Bookmark (what is this?)

[CiteULike logo](#)

[Connotea logo](#)

[BibSonomy logo](#)

[Mendeley logo](#)

[Facebook logo](#)

[del.icio.us logo](#)

[Digg logo](#)

[Reddit logo](#)