

## 01 SPECTROSCOPY

### Charmonium results from BES

平荣刚 (for BES collaboration)

Institute of High Energy Physics, Chinese Academy of Sciences, Beijing 100049, China

收稿日期 2010-1-25 修回日期 网络版发布日期 2010-5-5 接受日期 2010-5-5

#### 摘要

Using  $\sim 14 \times 10^6$   $\psi(2S)$  and  $\sim 58 \times 10^6$   $J/\psi$  data collected at BES II/BEPC, the branching fraction of  $\psi(2S) \rightarrow \Omega^- \Omega^+$  is measured with about  $5\sigma$  statistical significance. The  $\Lambda$  electric dipole and  $\Lambda$  decay parameter are studied using the decay  $J/\psi \rightarrow \Lambda \bar{\Lambda} \rightarrow pp \pi^+ \pi^-$ . Using  $(106 \pm 3) \times 10^6$   $\psi(2S)$  decays collected at BESIII/BEPC II, we have obtained some interesting physics results. The branching fractions of  $\chi_{c1} \rightarrow n^0 n^0$ ,  $\eta \eta$  are measured with precision improved. The mass and width of  $h_c(1^1 P^1)$  state, together with the branching fractions of  $\text{Br}(\psi(2S) \rightarrow n^0 h_c)$  and  $\text{Br}(h_c \rightarrow \gamma \eta_c)$  are the first measurements. Surprisingly, the decays of  $\chi_{c1} \rightarrow \phi \phi$ ,  $\omega \omega$ , and  $\omega \phi$  are firstly observed in BESIII data.

关键词 [charmonium decays](#), [J/ψ](#), [χ<sub>c1</sub>](#), [ψ\(2S\)](#), [BES II/BESIII experiment](#)

分类号

**DOI:**

通讯作者:

平荣刚 [pingrg@mail.ihep.ac.cn](mailto:pingrg@mail.ihep.ac.cn)

作者个人主页:

平荣刚 (for BES collaboration)

#### 扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF \(274KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献\[PDF\]](#)

▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)

▶ [加入我的书架](#)

▶ [加入引用管理器](#)

▶ [引用本文](#)

▶ [Email Alert](#)

相关信息

▶ [本刊中 包含“charmonium decays, J/ψ, χ<sub>c1</sub>, ψ\(2S\), BES II/BESIII experiment”的 相关文章](#)

▶ 本文作者相关文章

· [平荣刚 for BES collaboration](#)