



CIF-introduction

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La nostra agenda

- - CIF Intro: F. De Mori - 10'
- - Measurement of $J/\psi \rightarrow \omega \pi^0$: Alessio M. - 15'
- - Updates from Z_c studies: Marco S. - 10'
- - Relative Phase measurements and luminosity with $\psi(2S)$ scan: Giulio - 20'
- - Precise measurements of $BR(J/\psi \rightarrow KK)$ from $\psi(2S) \rightarrow \pi \pi J/\psi$ - 20'
FDM
- - LFVU with $\psi(2S) \rightarrow \tau \tau$ - 15' Isa

LE NOSTRE ANALISI

- Relative Phase of Charmonia:
 - J/ψ :
 - $p\bar{p}$ (Marco D.), K^+K^- (Francesca D.M.)
 - $\psi(2S)$: $e^+e^- \rightarrow \pi\pi J/\psi$ (Giulio)
 - Started collaboration with IHEP and USTC groups (China) to expand analyses to other final states ($\Sigma^0\Sigma^0$, $\Sigma^+\Sigma^-$, $\Lambda\Lambda$)
- Charmonium spectroscopy and decay
 - h_c mass and width (Marco S.)– advanced review
 - LFUV in $\psi(2S) \rightarrow \tau\tau$ (Isa): finalized selection for π/μ separation
 - $\psi(2S) \rightarrow \pi\pi J/\psi$, $J/\psi \rightarrow KK$ (Francesca)
 - $J/\psi \rightarrow \omega\pi^0$ (Alessio M.): measurement of possible G-parity contribution (phase measurement under study)

- Exotic:

- Search for **hidden-strangeness pentaquark (Giulio)**: use the 2020 data to improve sensitivity
- Search for $Z_c(4430)$ tetraquark in $e^+e^- \rightarrow \pi\pi\psi(2S)$ invariant mass (Marco S.)– preliminary feasibility study completed

What is missing?

- Feasibility study of $\Lambda(1520)$ decay in Λ e^+e^-
(Alessio G.+Marco D.)

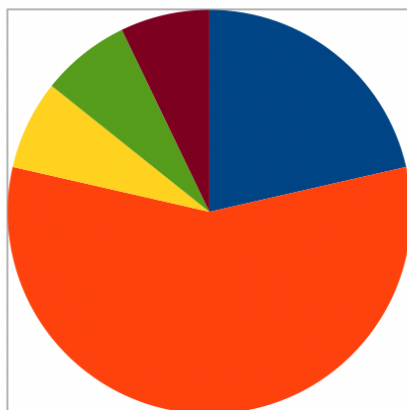
In progress

- Since last BES3-it
- CIF takes place quite regularly once a month
- An indico page has been created <https://agenda.infn.it/event/25446/>
- Presentations and minutes of CIF meetings can be found there.
- **Second meeting of phase analyses group** (the first official one) in BES3

On March 1st: two talks and fruitful discussions.

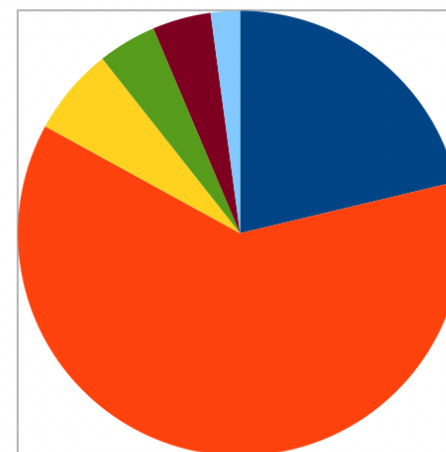
Publications

Submitted Papers



■ PRL
■ PRD
■ PLB
■ CPC
■ Nature

Published Papers



■ PRL
■ PRD
■ PLB
■ CPC
■ EPJ
■ JHEP

In 2020 published 39 papers plus another 9 in early 2021.
Submitted other 14

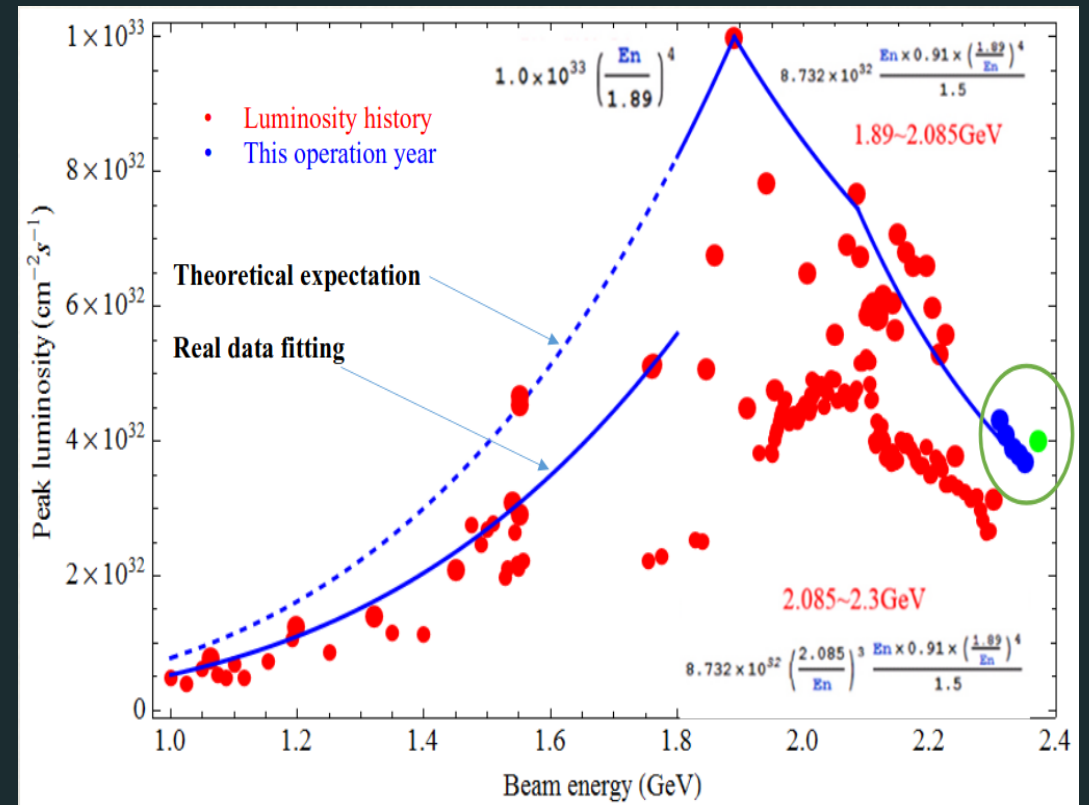
Data taking 2020-21

BEPCII upgrade completed

reached 4.946 GeV, new record 9/02/2021
154/pb

Data taking on-going since Nov 15

- New energies Scan (XYZ and charmed hadrons)
 - 500 pb⁻¹ @ E_{cm} = 4.74, 4.78, 4.84 GeV
 - 200 pb⁻¹ @ E_{cm} = 4.9 GeV
- 2.55B psi(2S) + 10% continuum data
- psi(3770) for the remaining of 2021 + 2022



Remote shifts started on February--> In this difficult situation, it is a good chance to help Chinese colleagues in data taking duties



...and now let's start!!!

