



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)
/ Publications of IISER Mohali (/jspui/handle/123456789/4)
/ Research Articles (/jspui/handle/123456789/9)

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/5098>

Title:	Measurement of Two-Particle Correlations of Hadrons in e^+e^- Collisions at Belle
Authors:	Patra, Sourav (/jspui/browse?type=author&value=Patra%2C+Sourav)
Keywords:	Measurement of Two-Particle Correlations Hadrons in e^+e^-
Issue Date:	2022
Publisher:	American Physical Society
Citation:	Physical Review Letters, 128(14), 142005.
Abstract:	The measurement of two-particle angular correlation functions in high-multiplicity e^+e^- collisions at $\sqrt{s} = 10.52$ GeV is reported. In this study, the 89.5 fb^{-1} of hadronic e^+e^- annihilation data collected by the Belle detector at KEKB are used. Two-particle angular correlation functions are measured in the full relative azimuthal angle ($\Delta\phi$) and three units of pseudorapidity ($\Delta\eta$), defined by either the electron beam axis or the event-shape thrust axis, and are studied as a function of charged-particle multiplicity. The measurement in the thrust axis analysis, with mostly outgoing quark pairs determining the reference axis, is sensitive to the region of additional soft gluon emissions. No significant anisotropic collective behavior is observed with either coordinate analyses. Near-side jet correlations appear to be absent in the thrust axis analysis. The measurements are compared to predictions from various event generators and are expected to provide new constraints to the phenomenological models in the low-energy regime.
Description:	Only IISER Mohali authors are available in the record.
URI:	https://doi.org/10.1103/PhysRevLett.128.142005 (https://doi.org/10.1103/PhysRevLett.128.142005) http://hdl.handle.net/123456789/5098 (http://hdl.handle.net/123456789/5098)
Appears in	Research Articles (/jspui/handle/123456789/9)
Collections:	

Files in This Item:

File	Description	Size	Format	
Need to add pdf.docx (/jspui/bitstream/123456789/5098/1/Need%20to%20add%20pdf.docx)		9.74 kB	Microsoft Word XML	View/Open (/jspui/bitstream/123456789/5098/1/Need%20to%20add%20pdf.docx)

[Show full item record \(/jspui/handle/123456789/5098?mode=full\)](/jspui/handle/123456789/5098?mode=full)

[Statistics \(/jspui/handle/123456789/5098/statistics\)](/jspui/handle/123456789/5098/statistics)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.

