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Quark coalescence from RHIC to LHC

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\begin{document}
% do not change the conference title
\noindent{\underline{The 12th International Conference on Nucleus-Nucleus Collisions, June 21-26, 2015, Catania, Italy}}

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\begin{center}
% insert the title of your abstract here

{\large \bf Quark coalescence from RHIC to LHC}
\end{center}

\begin{center}
% insert the authors here. The presenter is underlined
\underline{V.Minissale1,2, F.Scardina1,2, V.Greco1,2}
\end{center}

\begin{center}
% these are the corresponding institutions
{\em 1 Department of Physics and Astronomy, University of Catania, Via S. Sofia 62, I-95123, Catania, Italy.} \\
{\em 2 INFN-LNS,Laboratori Nazionali del Sud, Via S. Sofia 64,I-95123, Catania, Italy}\}
\end{center}

% write your abstract here
We discuss the application of a phase-space coalescence plus fragmentation model for the hadronization of the quark-gluon plasma (QGP) created in ultra-relativistic heavy-ion collisions. Recombination of minijet partons with the partons from the QGP is also included and plays a role at  $p_T \sim 2 - 4$  GeV where the baryon to meson
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anomaly is observed experimentally. We show our prediction for light and strange hadrons transverse momentum spectra (π , p , k , Λ , ϕ , Ω) and baryon to meson ratios (p/π , Λ/k , Ω/ϕ) in a wide range of p_T , both for RHIC and LHC energies. The baryon to meson ratio at LHC presents similar features of that at RHIC, but with a shift in the peak of about 0.5 GeV, and this is well predicted by our model.

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Primary author: MINISSALE, Vincenzo (University of Catania / INFN-LNS, Italy)

Presenter: MINISSALE, Vincenzo (University of Catania / INFN-LNS, Italy)

Session Classification: Relativistic Heavy-Ion Collisions

Track Classification: Relativistic Heavy-Ion Collisions