

# Jet Quenching in Non-Conformal Holography

Andrej Ficnar, Jorge Noronha, Miklos Gyulassy

(Submitted on 30 Jun 2011)

We use our non-conformal holographic bottom-up model for QCD described in [1012.0116](#) to further study the effect of the QCD trace anomaly on the energy loss of both light and heavy quarks in a strongly coupled plasma. We compute the nuclear modification factor  $R_{AA}$  for bottom and charm quarks in an expanding plasma with Glauber initial conditions. We find that the maximum stopping distance of light quarks in a non-conformal plasma scales with the energy with a temperature (and energy) dependent effective power.

Comments: 4 pages, 1 figure. Proceedings for Quark Matter 2011

Subjects: **High Energy Physics - Phenomenology (hep-ph)**; Nuclear Theory (nucl-th)

Cite as: [arXiv:1106.6303](#) [hep-ph]

(or [arXiv:1106.6303v1](#) [hep-ph] for this version)

## Submission history

From: Andrej Ficnar [[view email](#)]

[v1] Thu, 30 Jun 2011 17:05:18 GMT (196kb,D)

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

## Download:

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

## Current browse context:

hep-ph

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

[new](#) | [recent](#) | [1106](#)

## Change to browse by:

[nucl-th](#)

## References & Citations

- [INSPIRE HEP](#)  
([refers to](#) | [cited by](#))
- [NASA ADS](#)

## Bookmark([what is this?](#))



Science  
WISE