

ExtreMe Matter Institute Rapid Reaction Task Force Symposium
The space-time structure of jet quenching: theory and experiment
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Dynamical core-corona initialization and its application to jet physics

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Setting

Model: PYTHIA ver.8.230 + dynamical core-corona initialization

System: p+p 7 TeV, parton level or hadron level

of events: 6.5K (p+p)

Mode: $p_{\text{thatmin}} = 300 \text{ GeV}$

Jet finding: Anti-kT algorithm via FASTJET

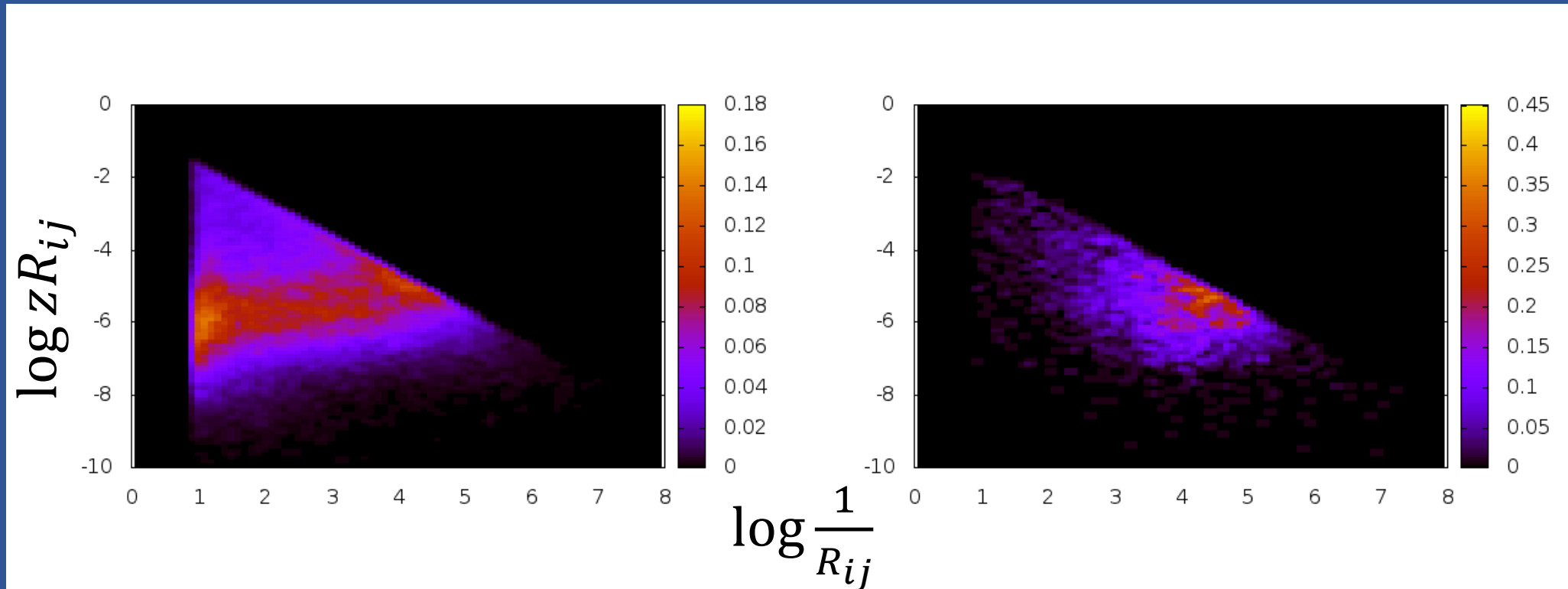
De-clustering: Cambridge-Aachen algorithm via FASTJET

Observables: Lund plane, EMMI plane

Lund: p+p 7 TeV, $p_{\text{thatmin}} = 300$ GeV, parton level

input

output

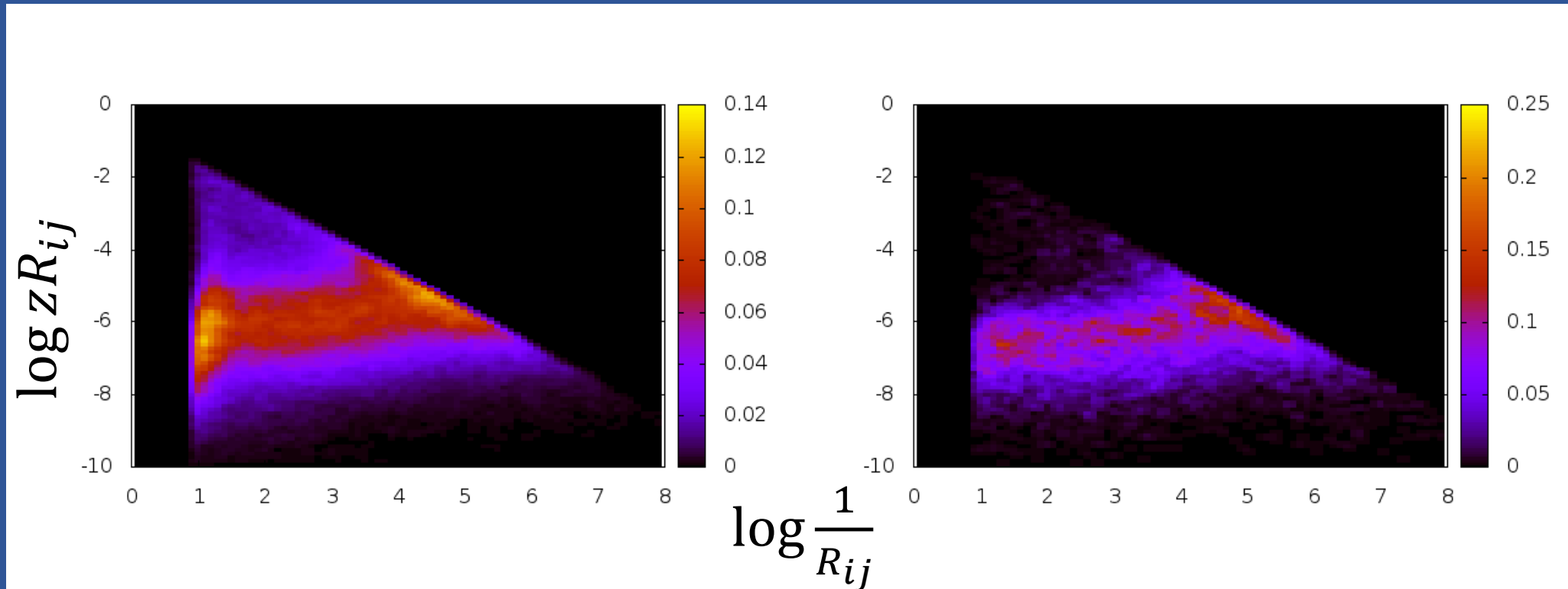


Anti-kT $R=0.4$, $p_{\text{Tcut}} = 300$ GeV, $|\eta| < 2.0$, C/A declustering

Lund: p+p 7 TeV, $p_{\text{thatmin}} = 300$ GeV, hadron level

input

output

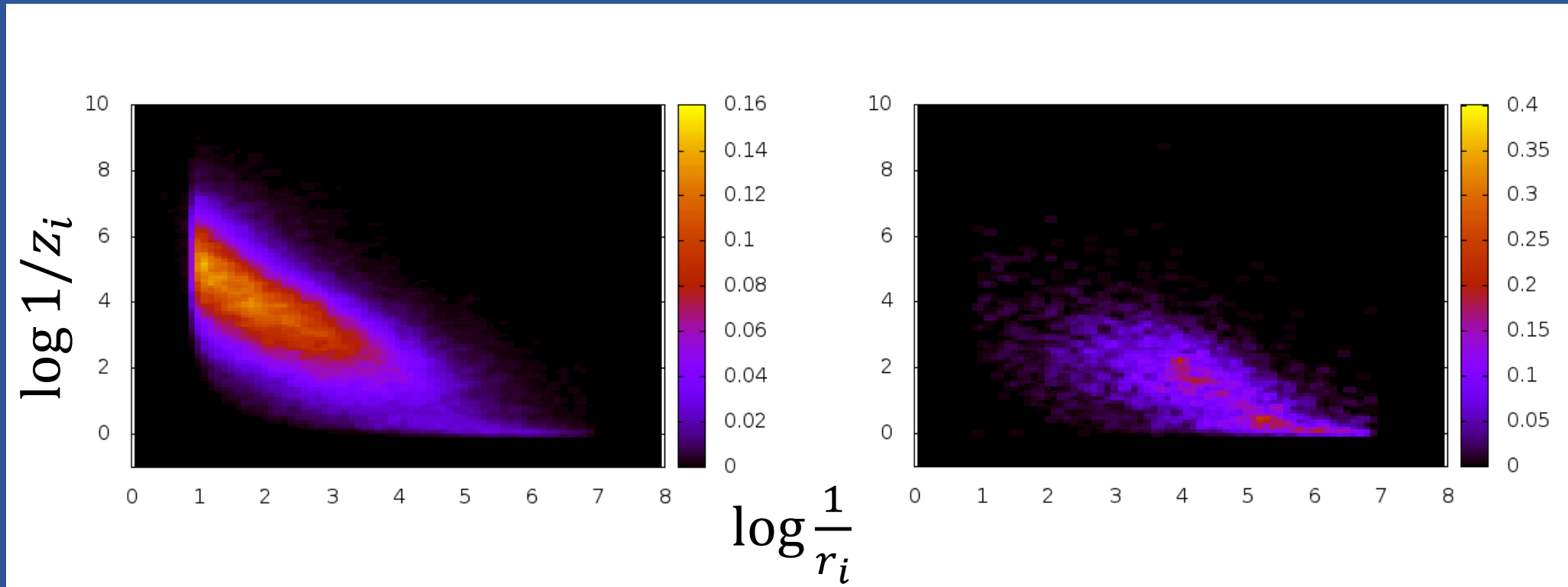


Anti-kT $R=0.4$, $p_{\text{Tcut}} = 300$ GeV, $|\eta| < 2.0$, C/A declustering

EMMI: p+p 7 TeV, $p_{\text{thatmin}} = 300$ GeV, parton level

input

output

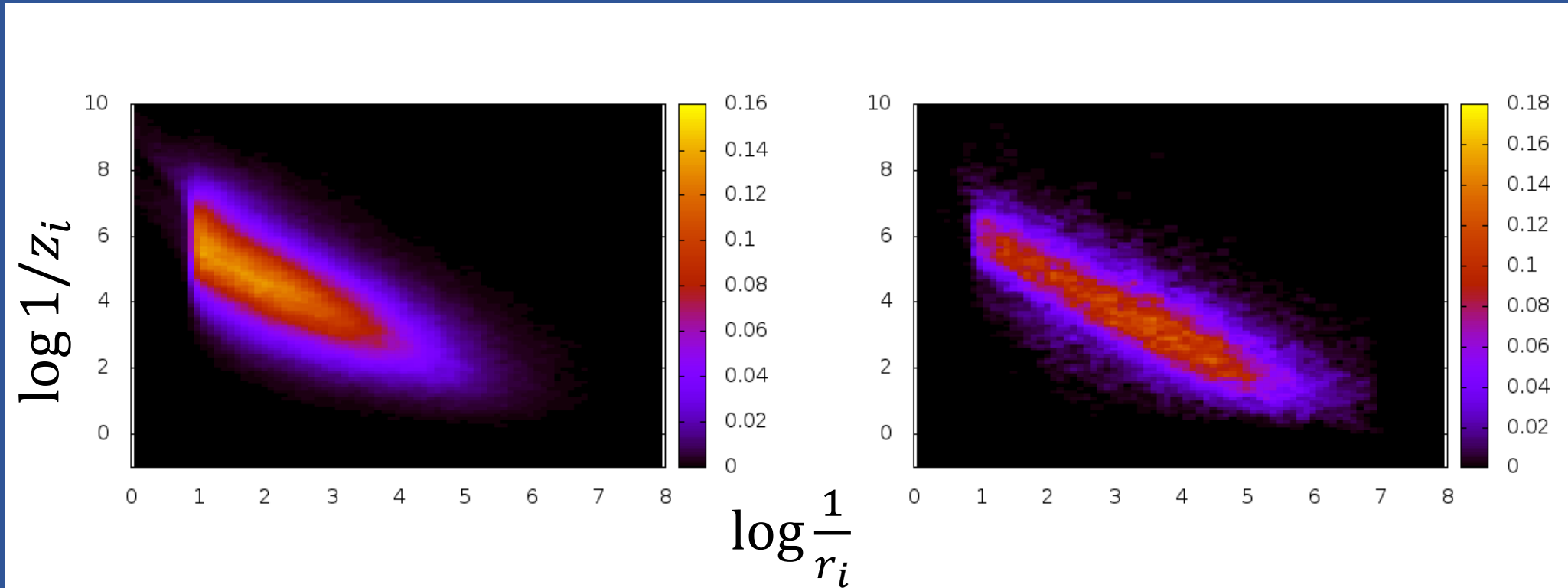


Anti-kT $R=0.4$, $p_{\text{Tcut}} = 300$ GeV, $|\eta| < 2.0$

EMMI: p+p 7 TeV, $p_{\text{thatmin}} = 300$ GeV, hadron level

input

output



Anti-kT $R=0.4$, $p_{\text{Tcut}} = 300$ GeV, $|\eta| < 2.0$