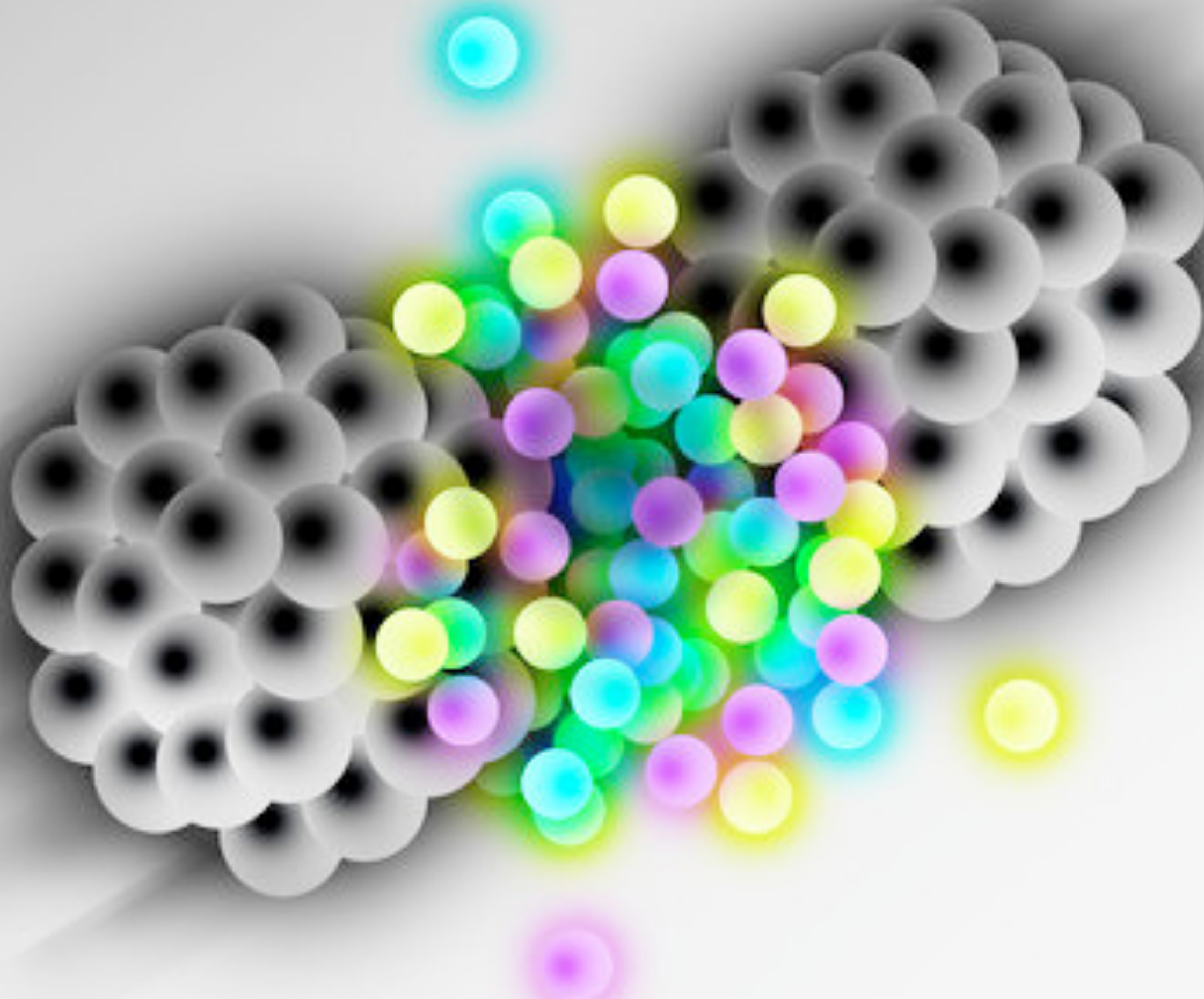


EMMI - Wednesday morning

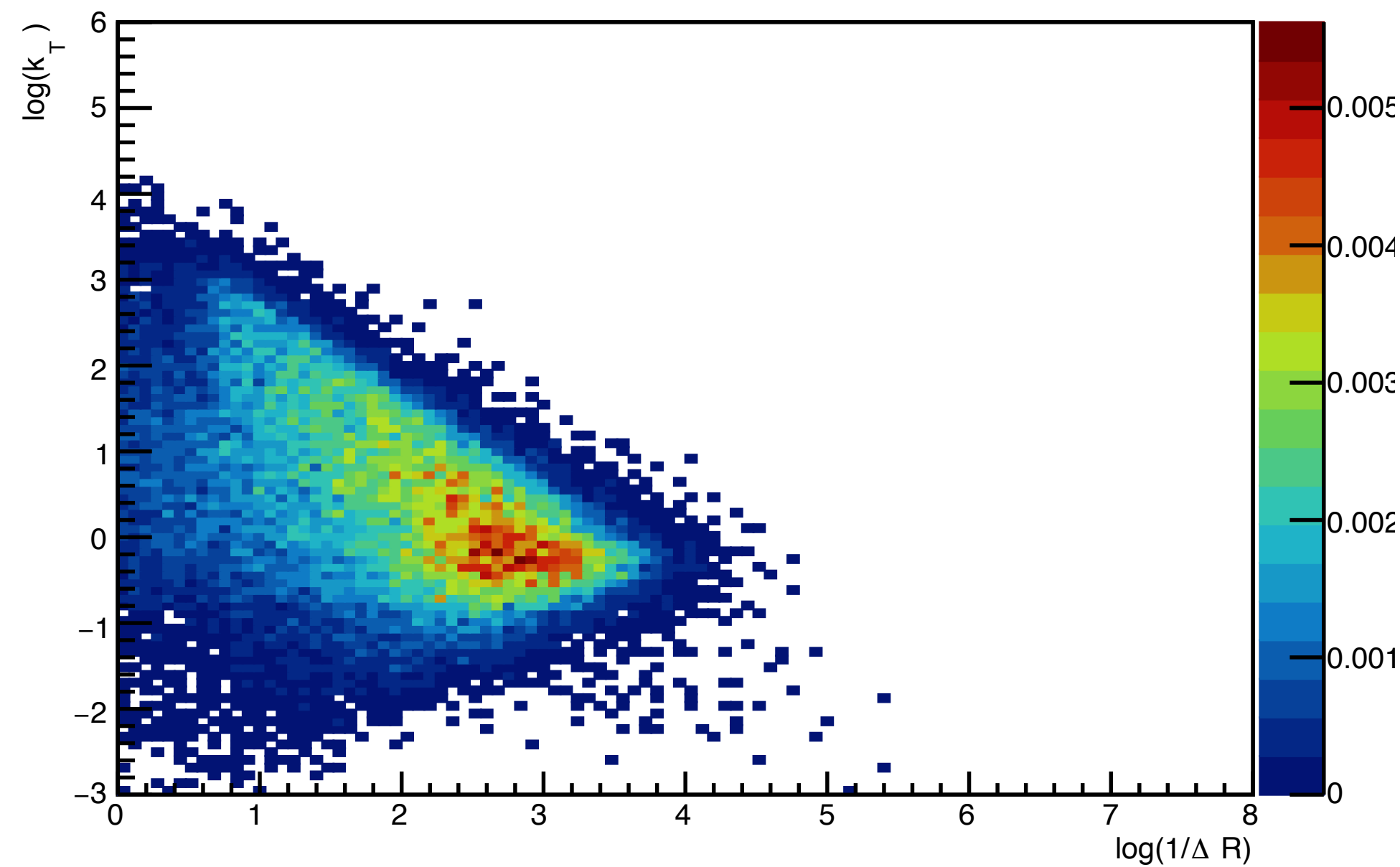
Lund Planes with Shower history vs Unclustering **(Pythia8 parton level)**



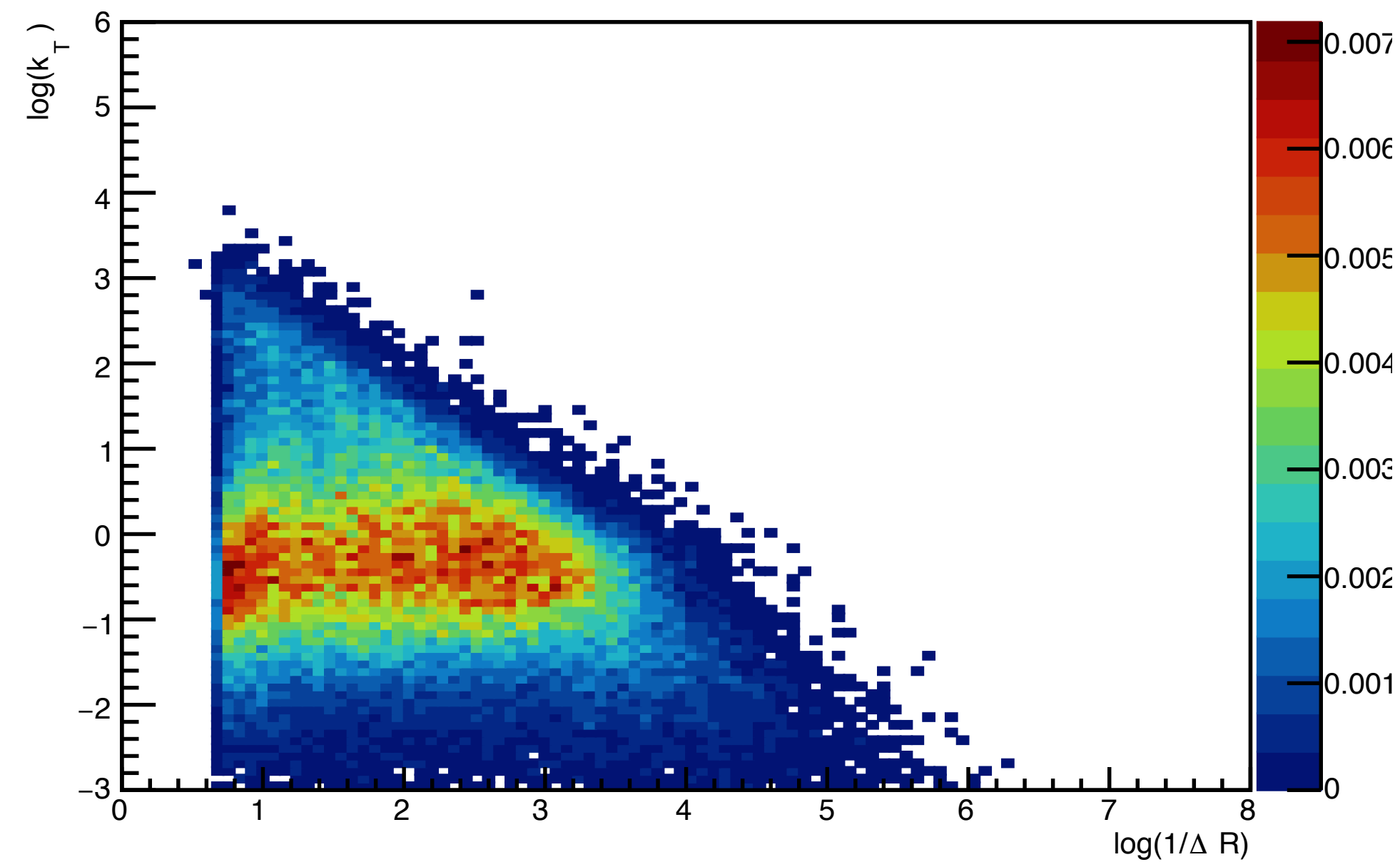
“All” phase space

**$\sqrt{s} = 5.02 \text{ TeV}$
Leading jet
 $p_t > 70 \text{ GeV}$
 $R = 0.4$
 $|\eta| < 2.0$
(parton level)**

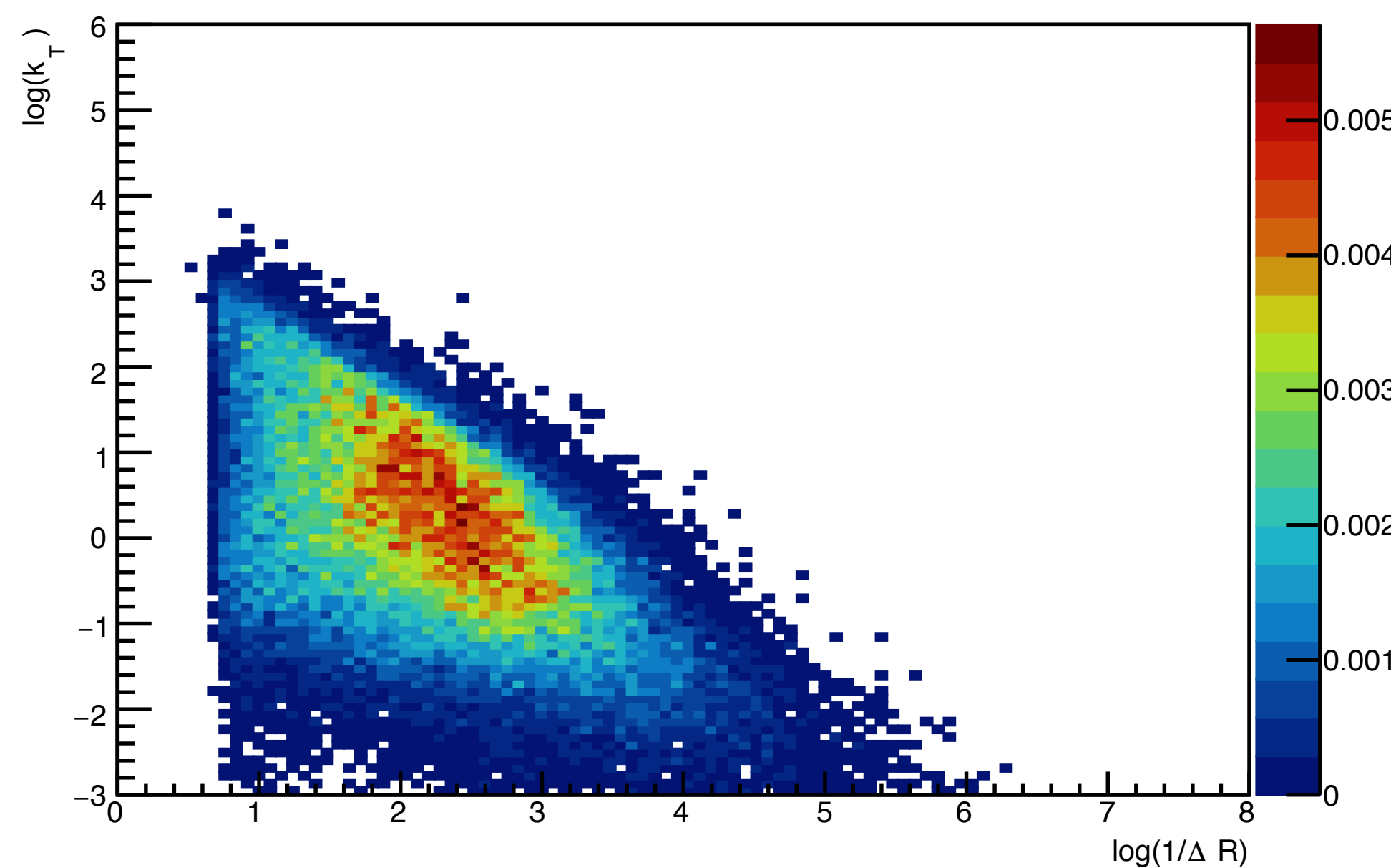
lund_lead_pythia



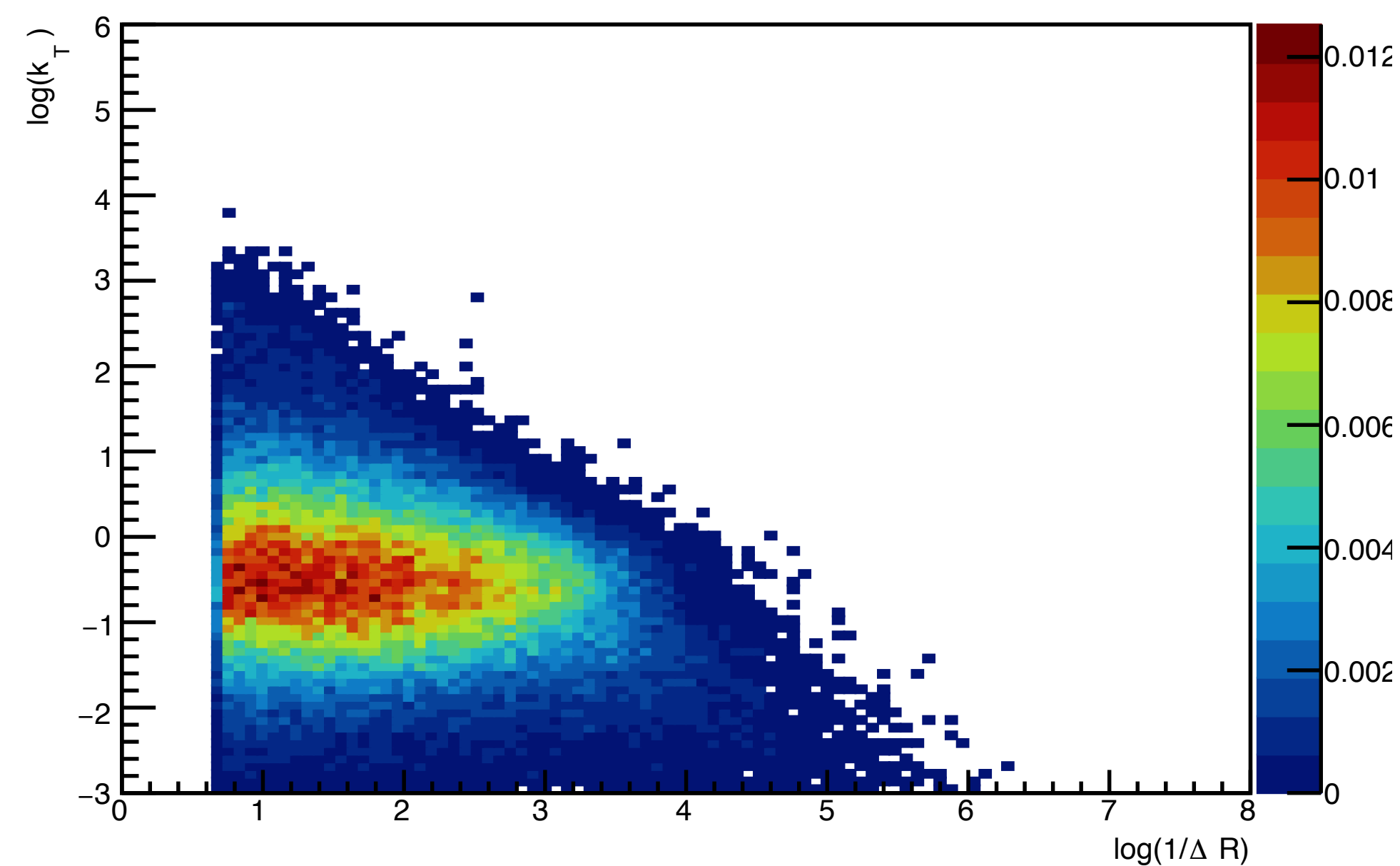
lund_lead_uncluster_ca



lund_lead_uncluster_kt

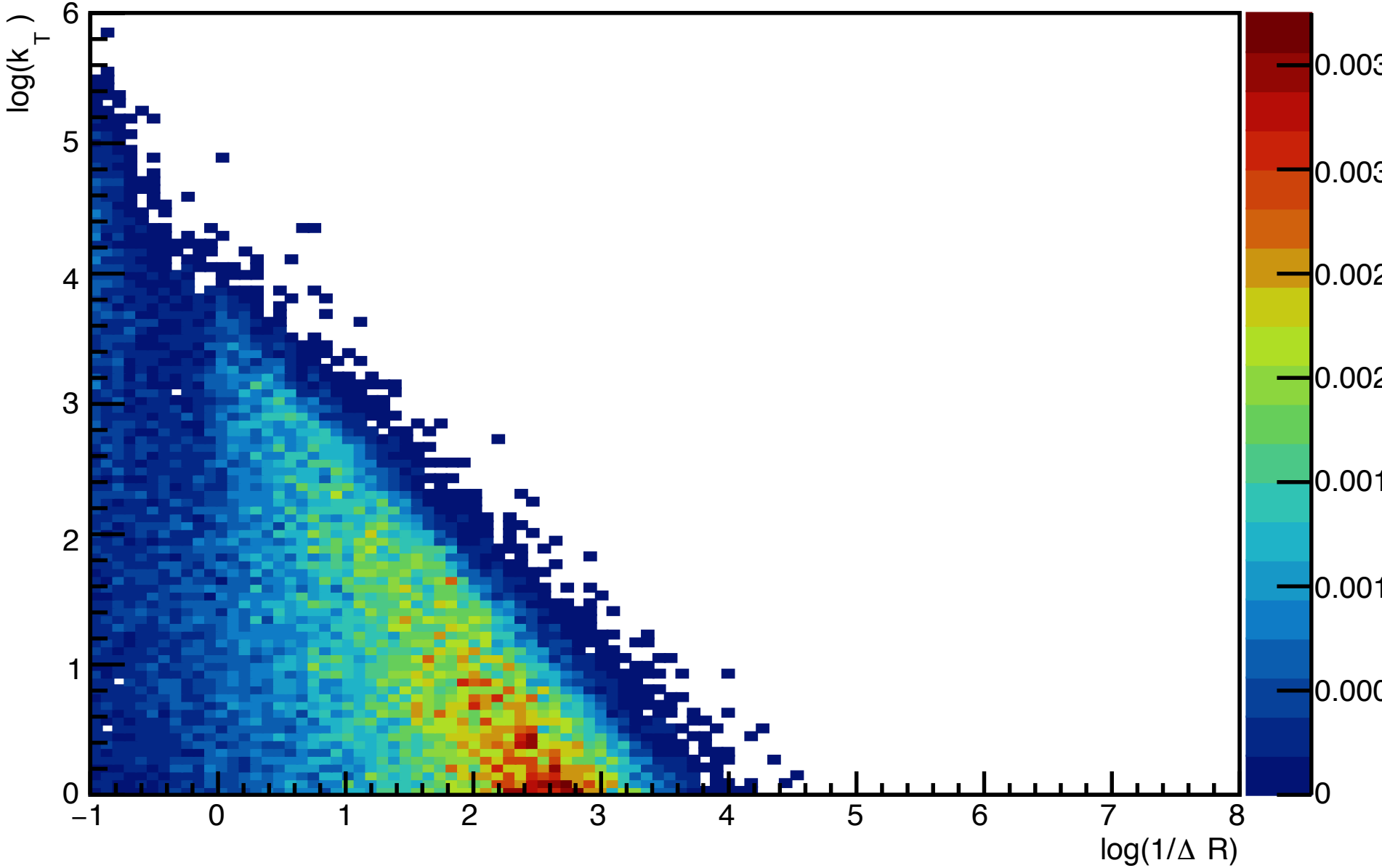


lund_lead_uncluster_akt

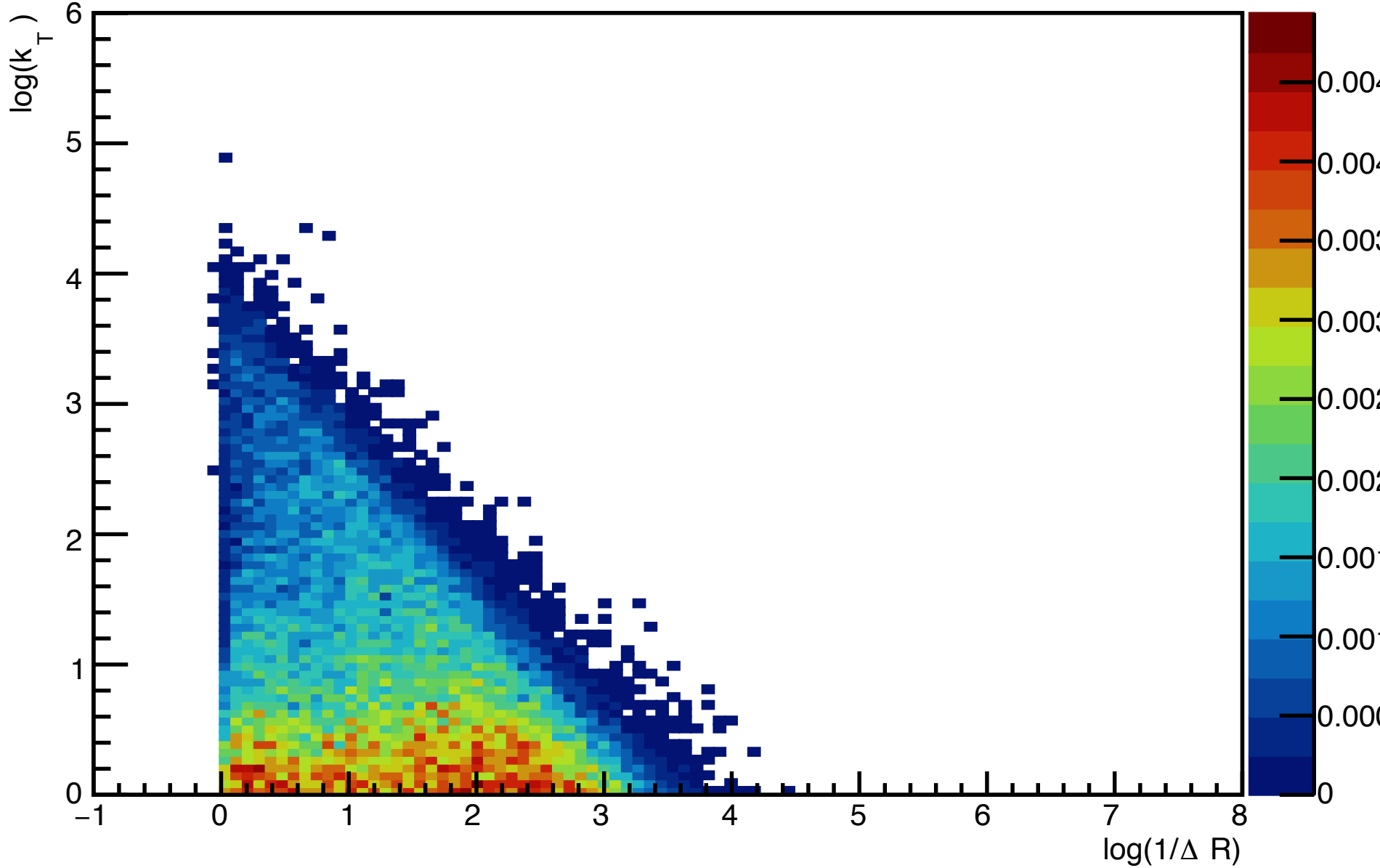


Zooming...

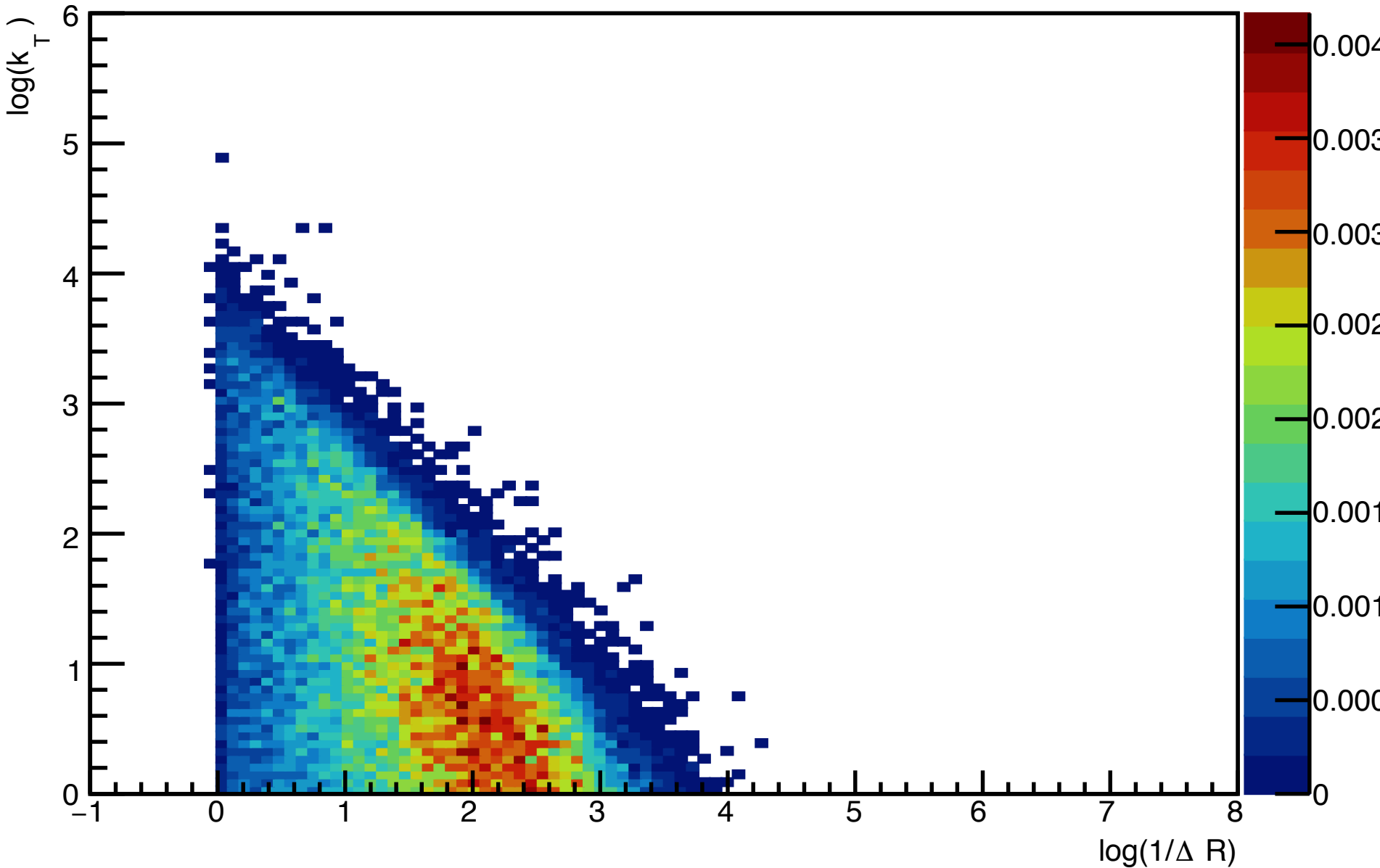
lund_lead_pythia



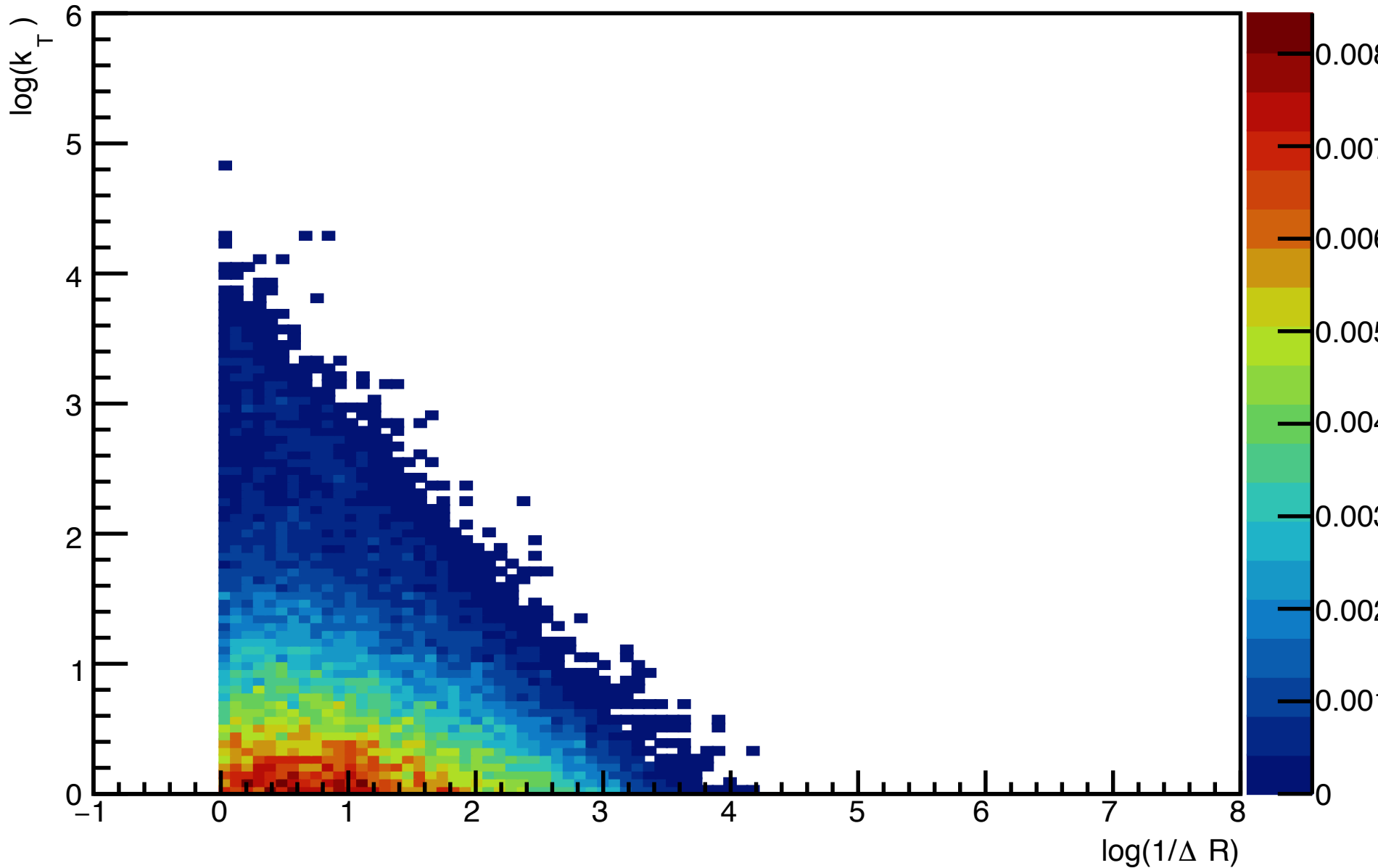
lund_lead_uncluster_ca



lund_lead_uncluster_kt



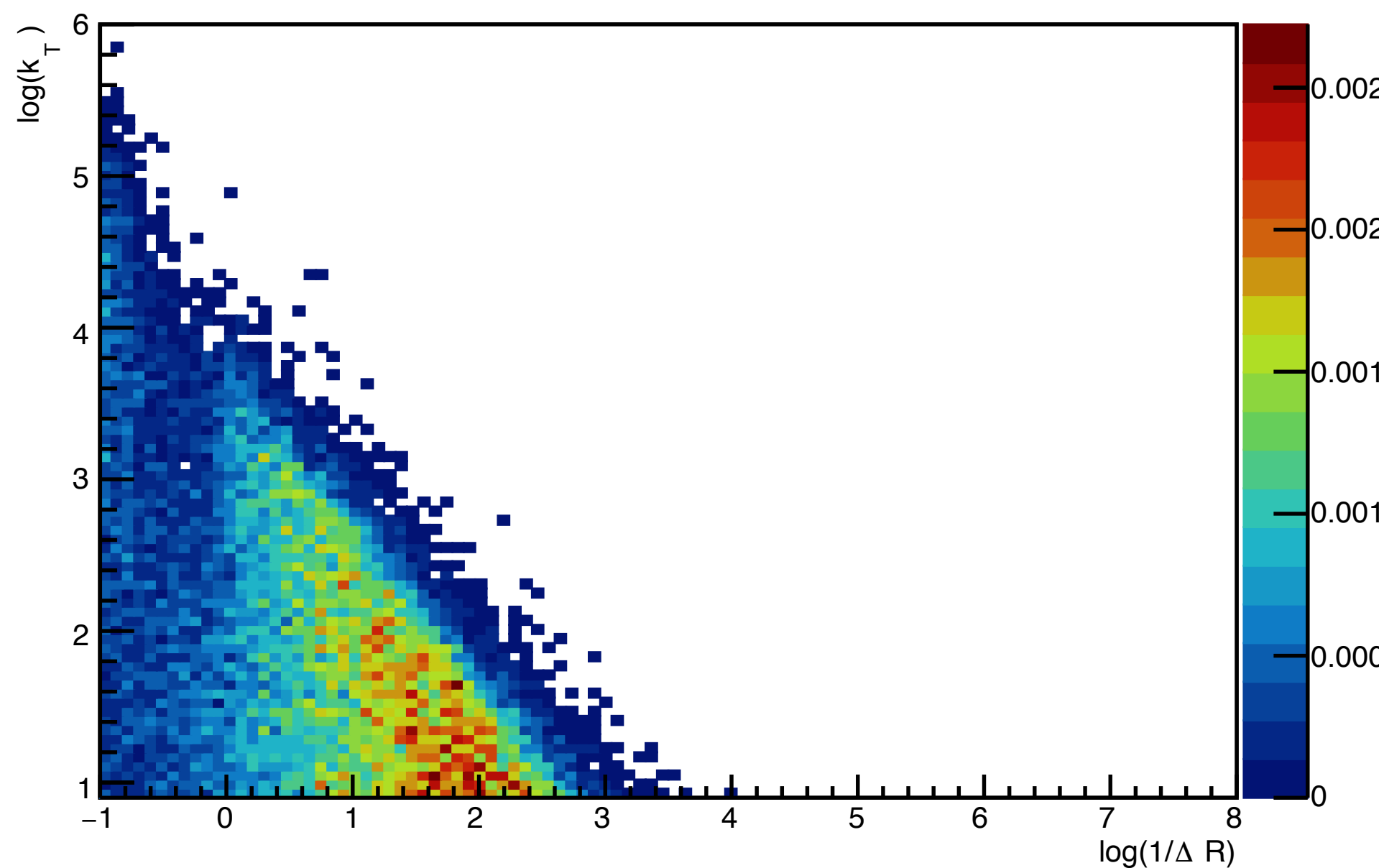
lund_lead_uncluster_akt



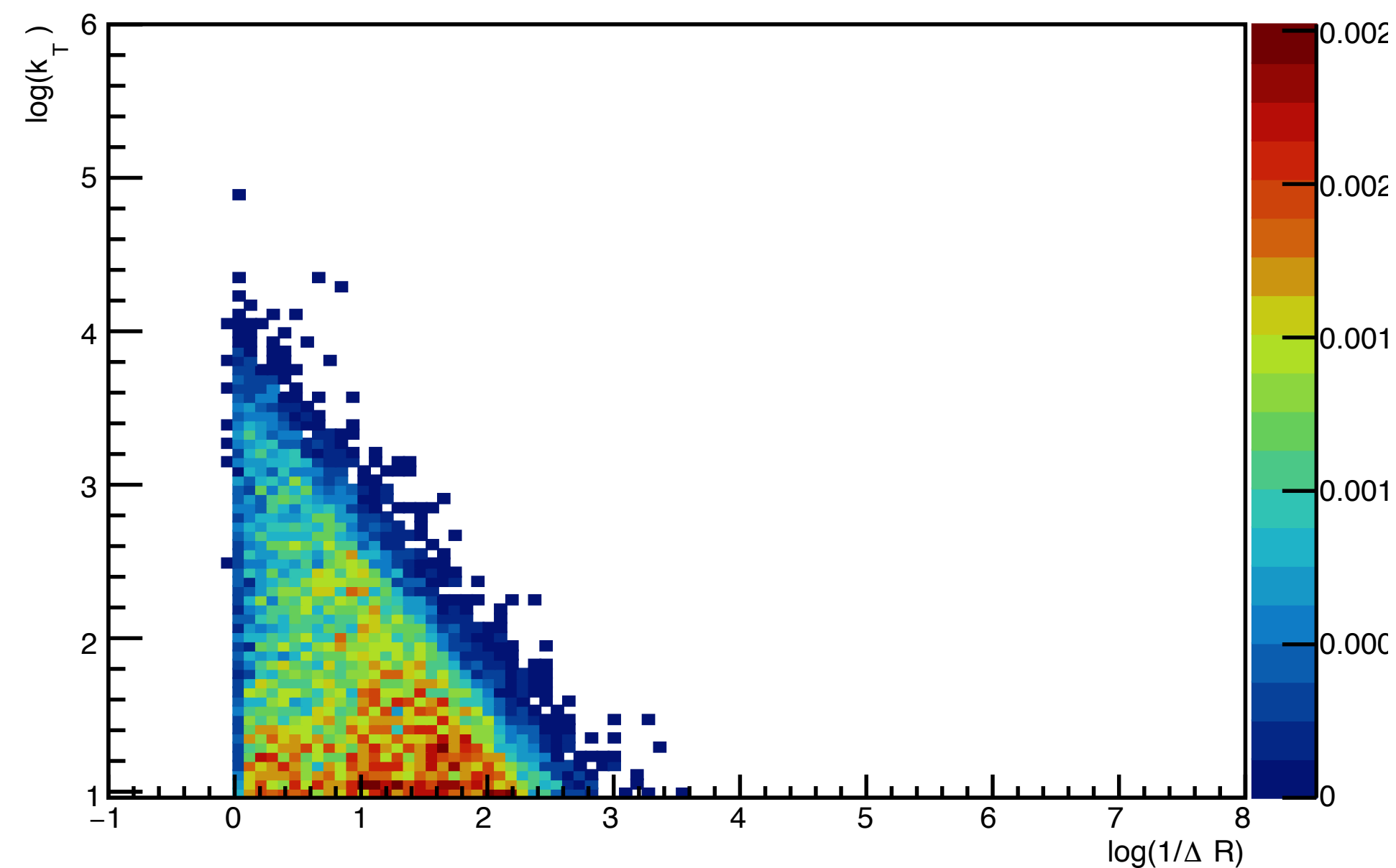
sqrt(s) = 5.02 TeV
Leading jet
pt > 70 GeV
R = 0.4
|eta| < 2.0
(parton level)

Zooming further...

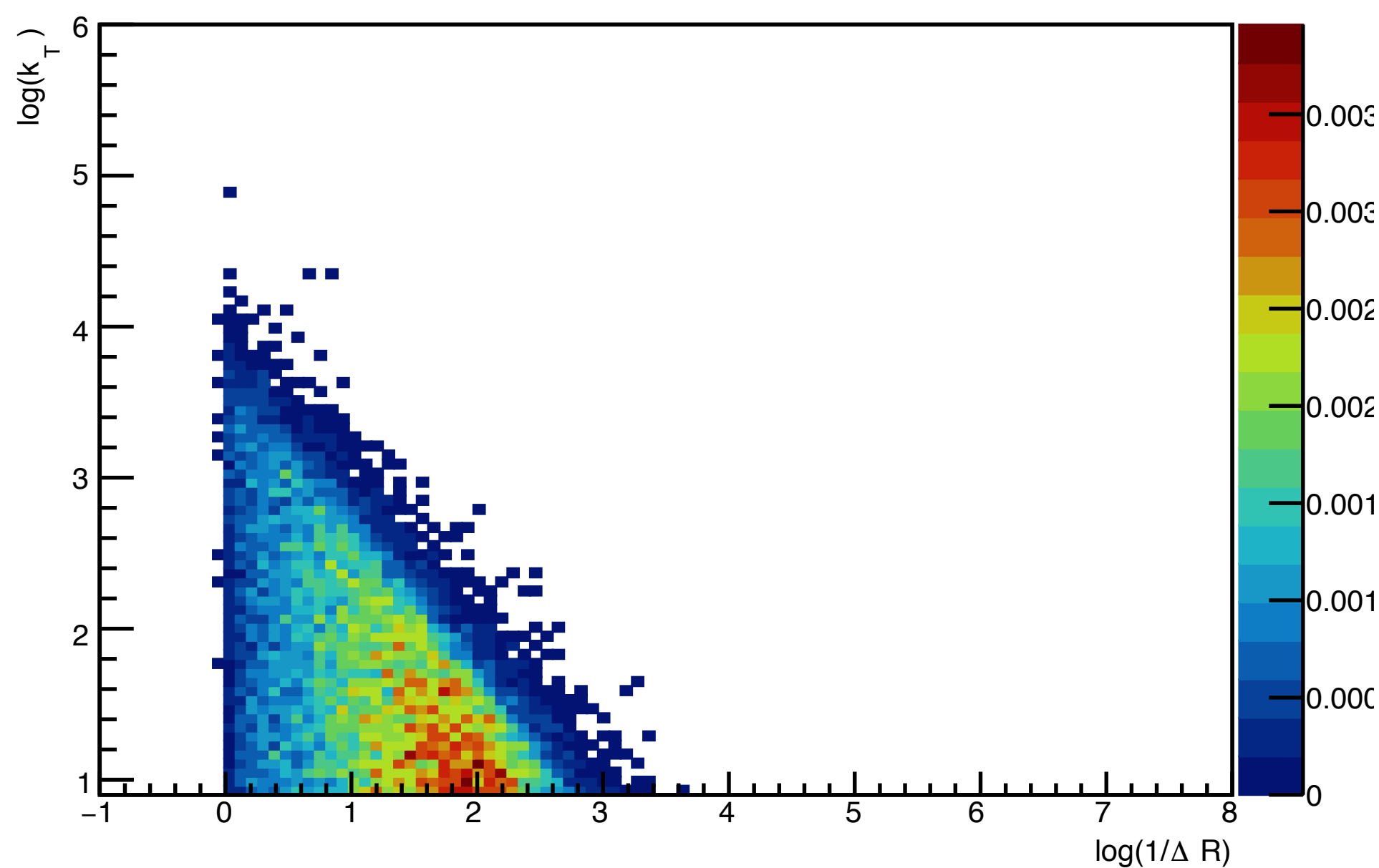
lund_lead_pythia



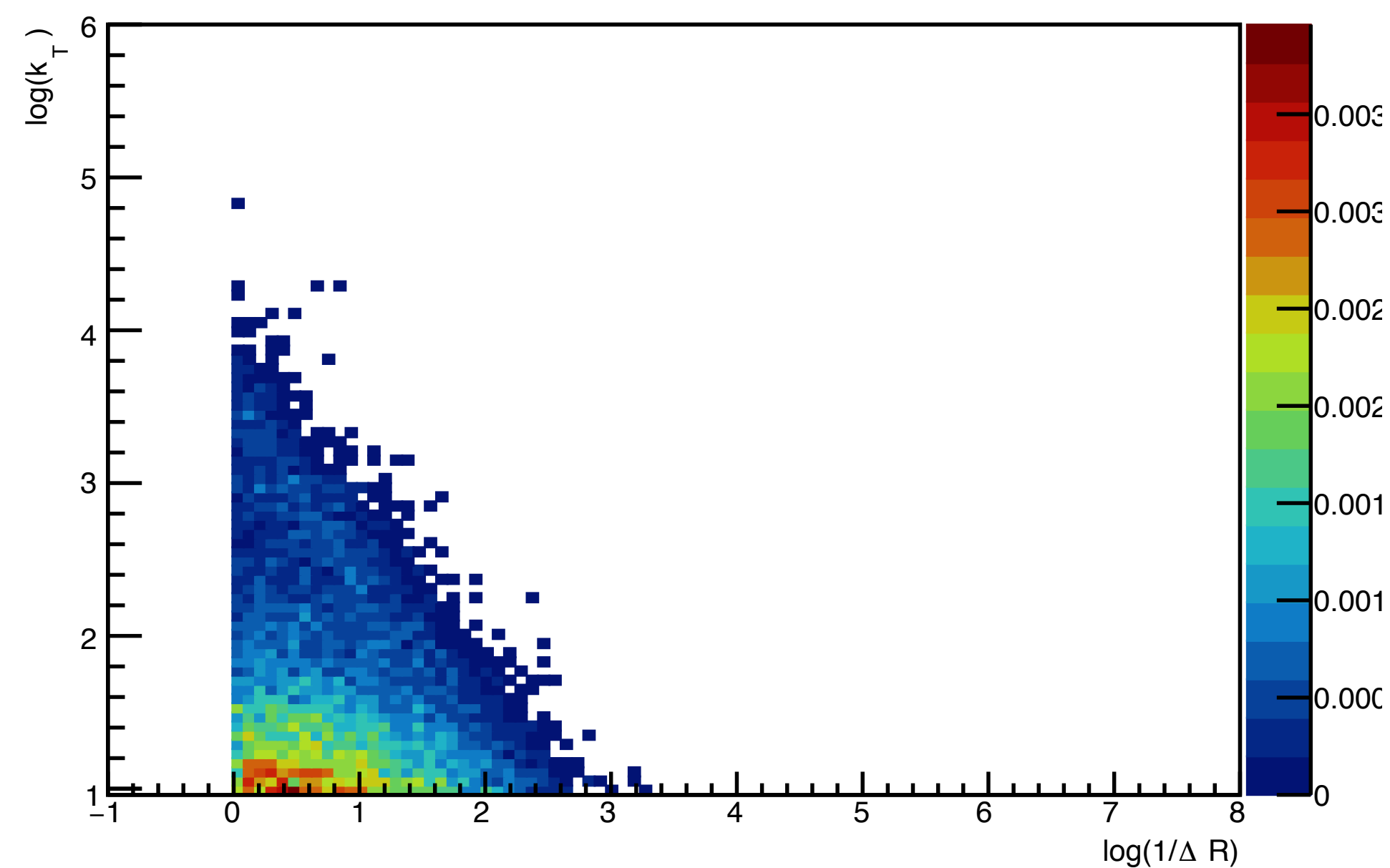
lund_lead_uncluster_ca



lund_lead_uncluster_kt

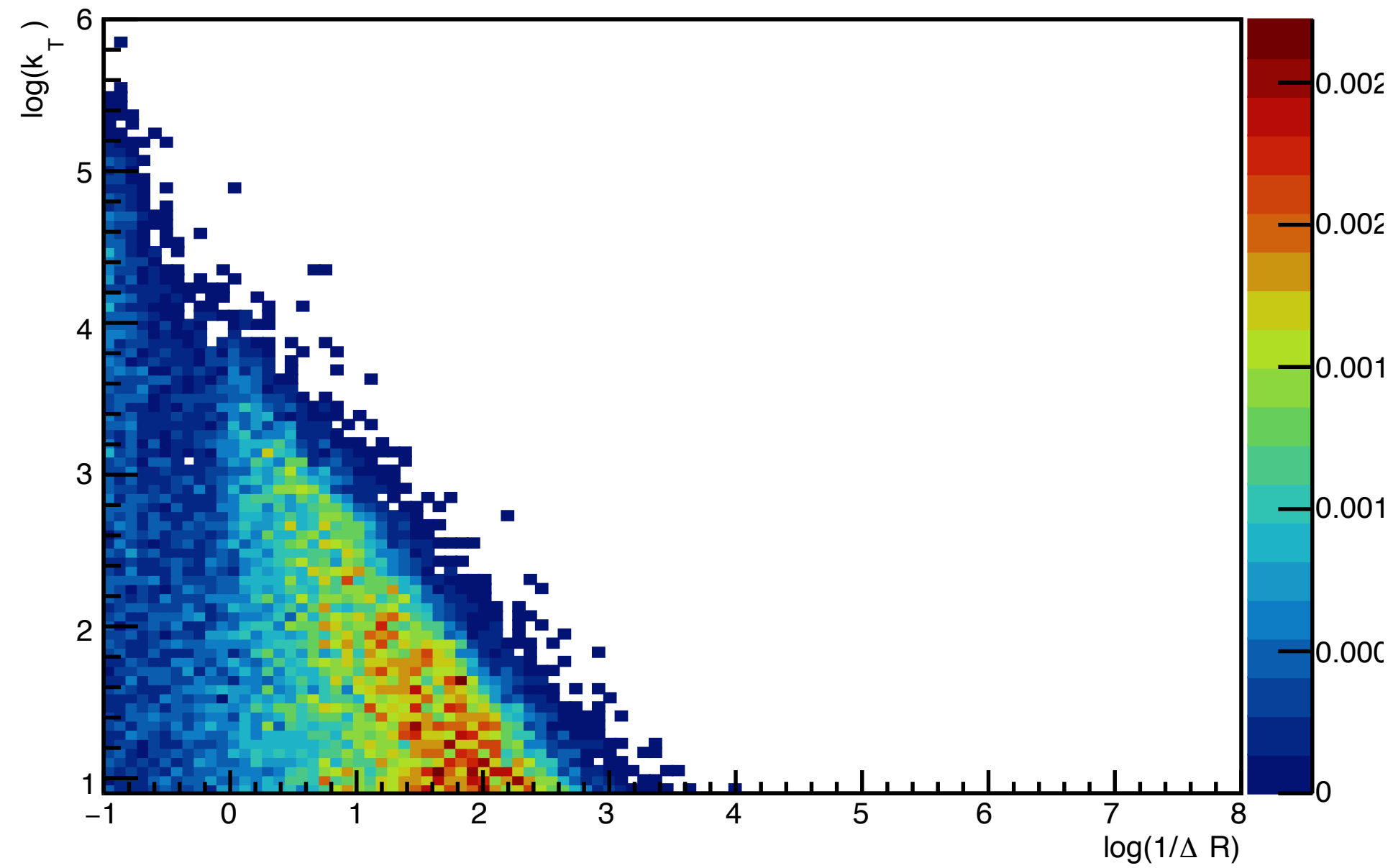


lund_lead_uncluster_akt

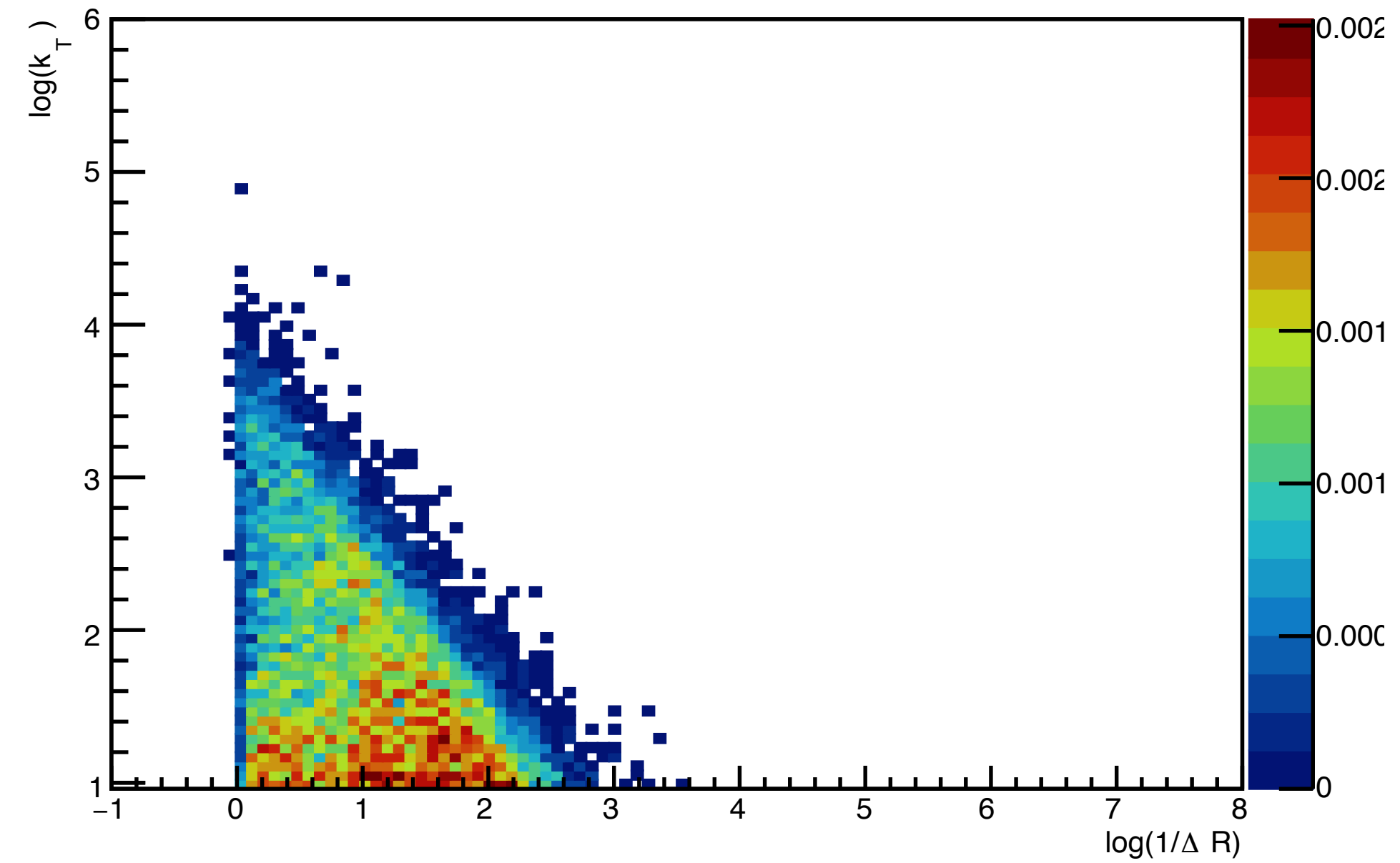


sqrt(s) = 5.02 TeV
Leading jet
pt > 70 GeV
R = 0.4
|eta| < 2.0
(parton level)

lund_lead_pythia

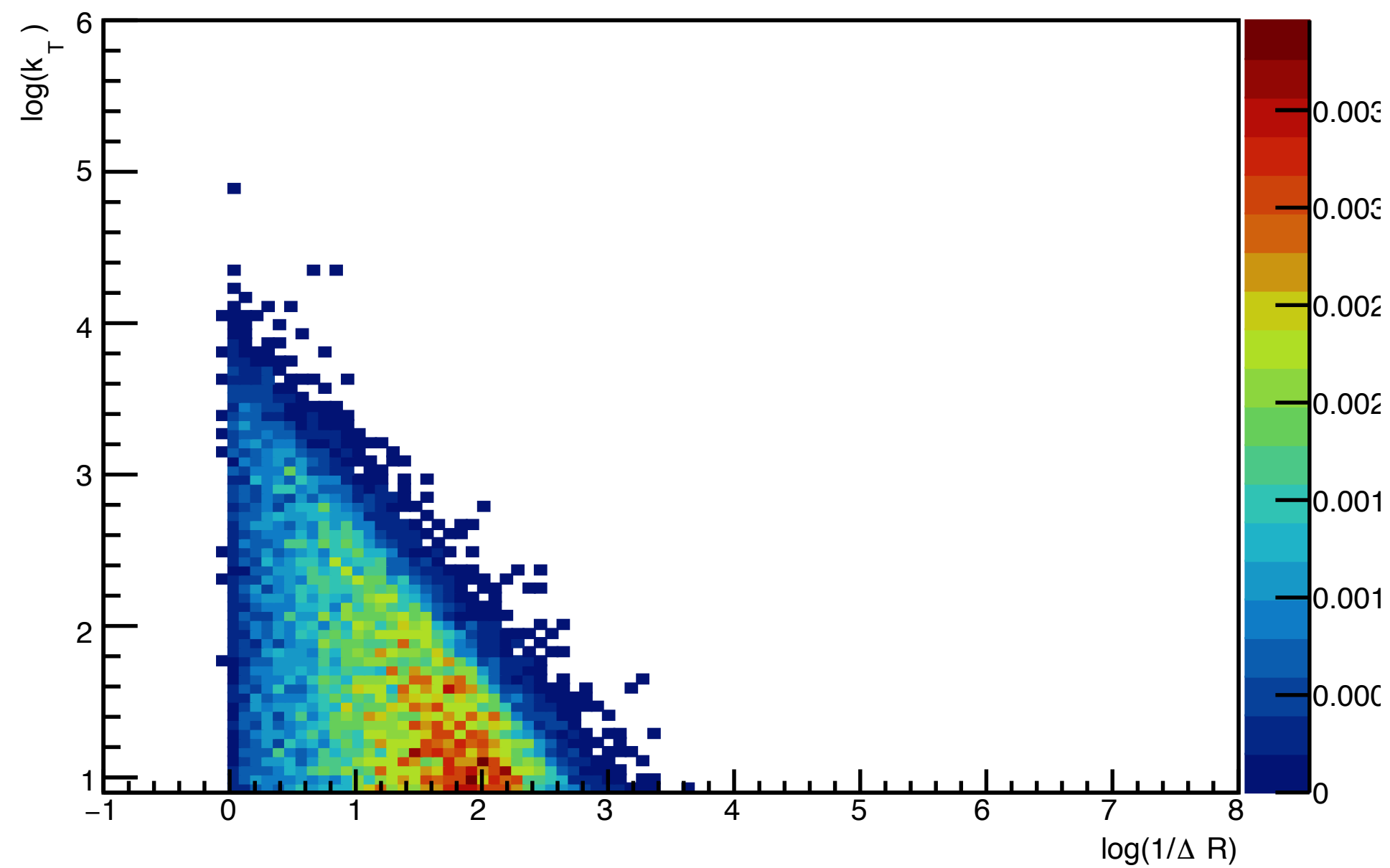


lund_lead_uncluster_ca

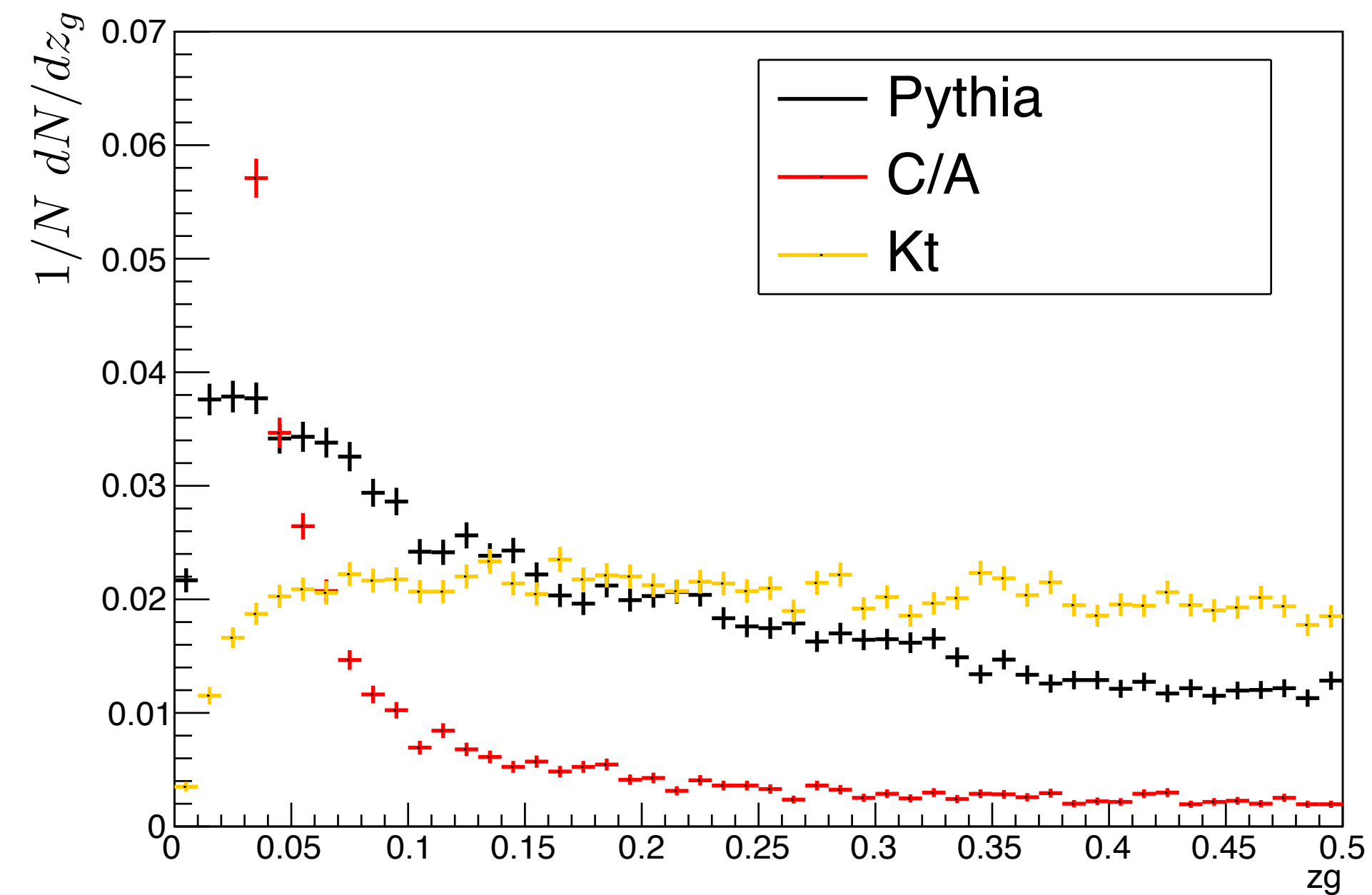


$\sqrt{s} = 5.02 \text{ TeV}$
Leading jet
 $p_t > 70 \text{ GeV}$
 $R = 0.4$
 $|\eta| < 2.0$
(parton level)

lund_lead_uncluster_kt



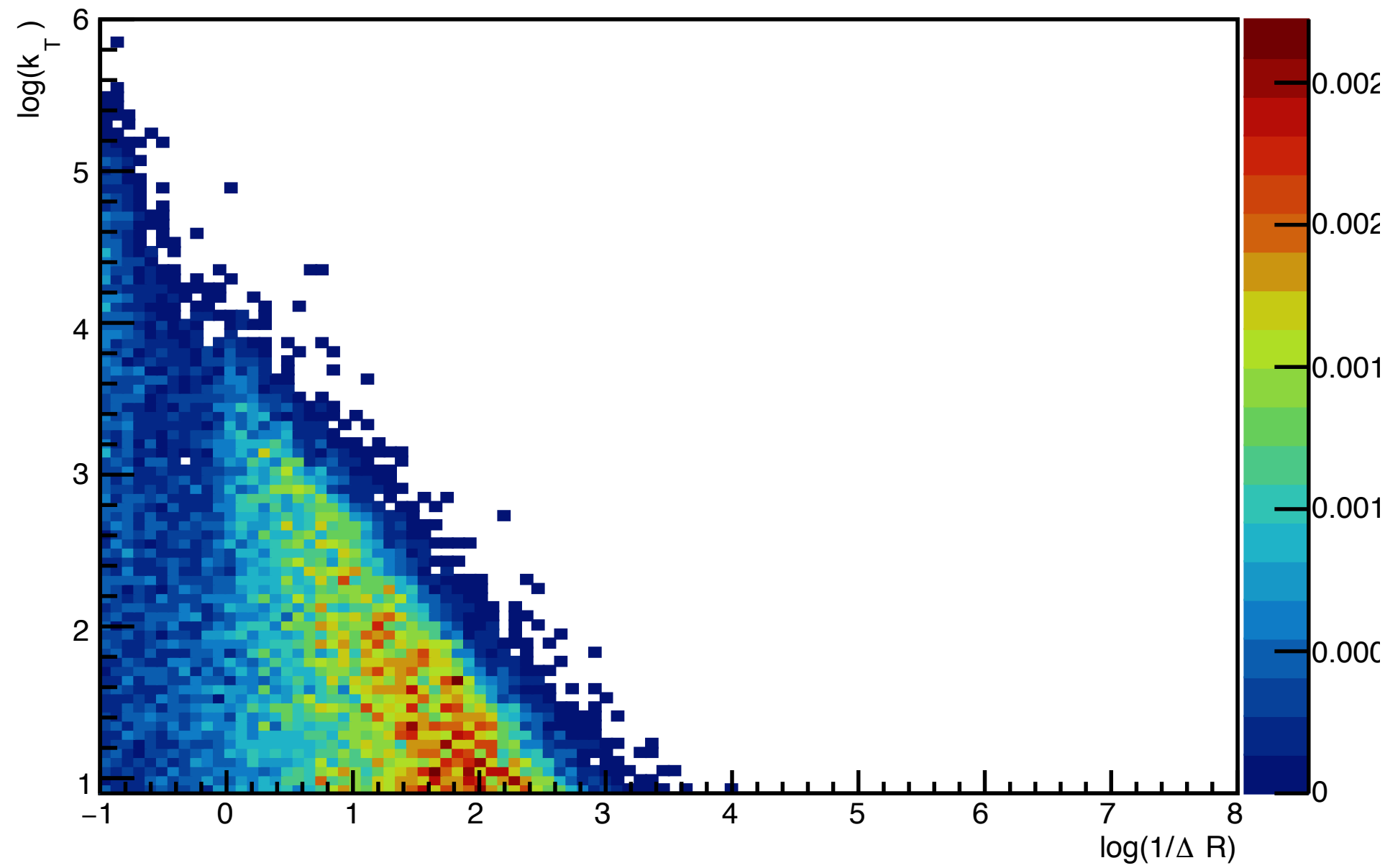
zg_lead_1stSplitting



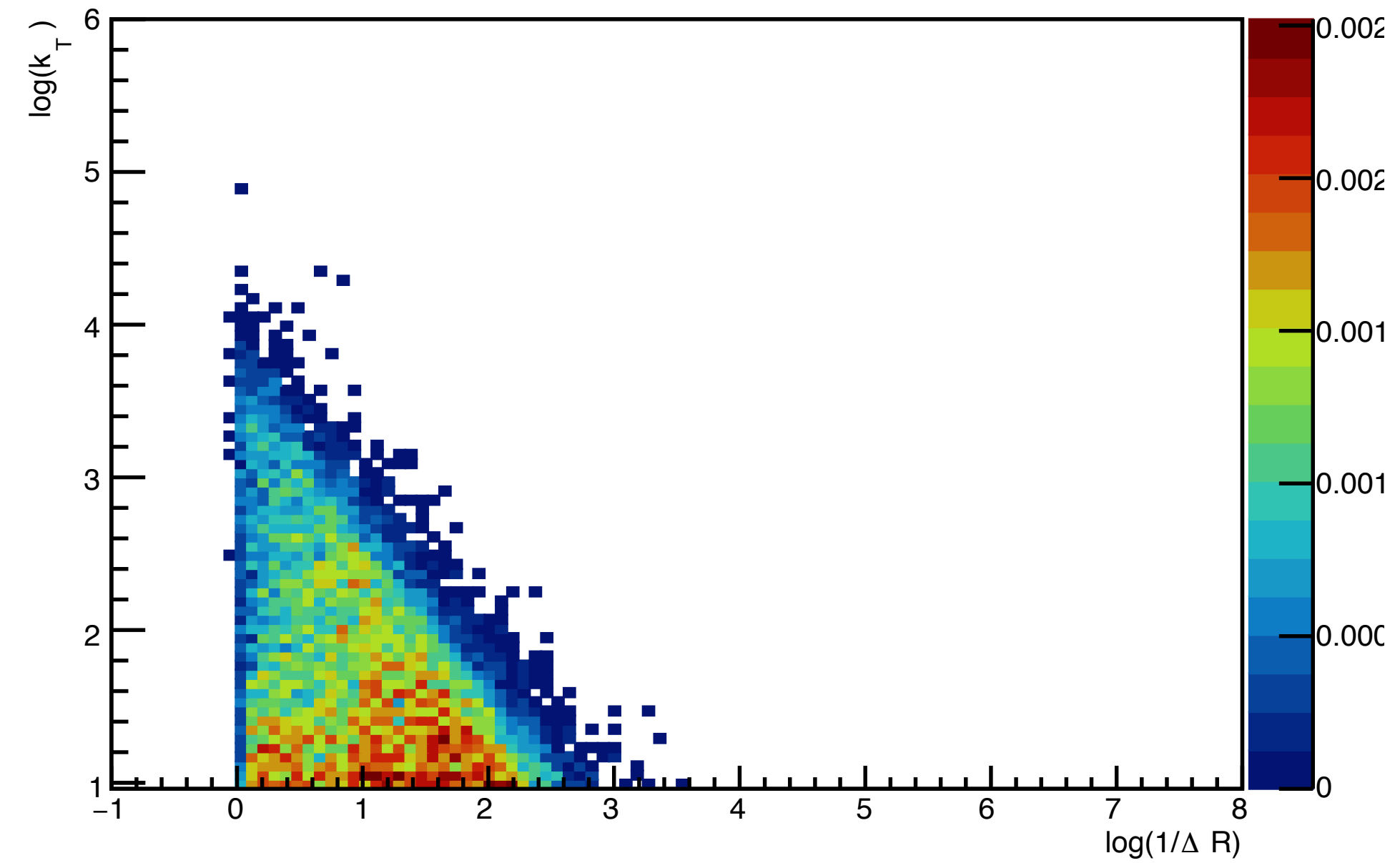
Energy fraction in the
“1st splitting”

(Normalised
distributions)

lund_lead_pythia

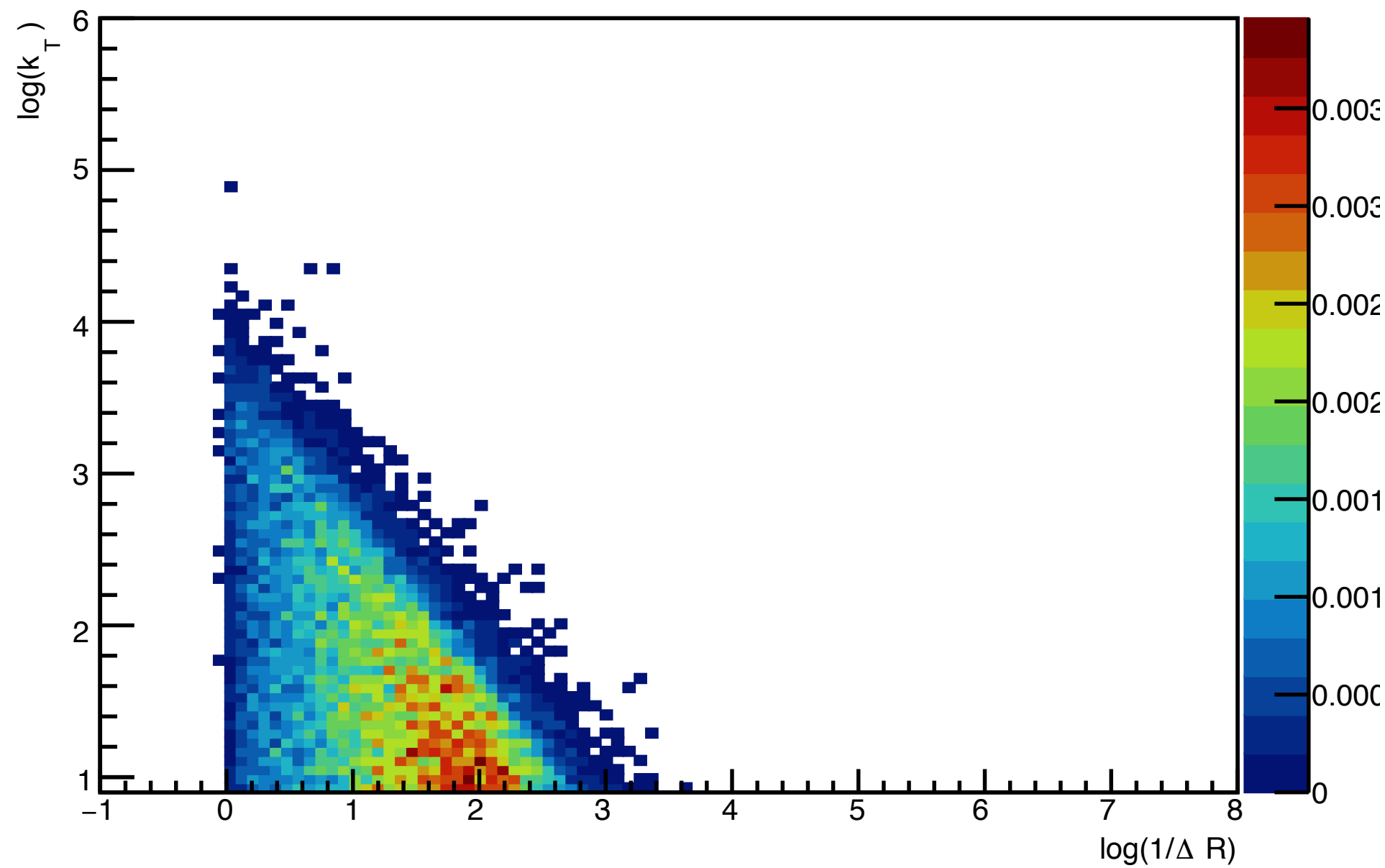


lund_lead_uncluster_ca

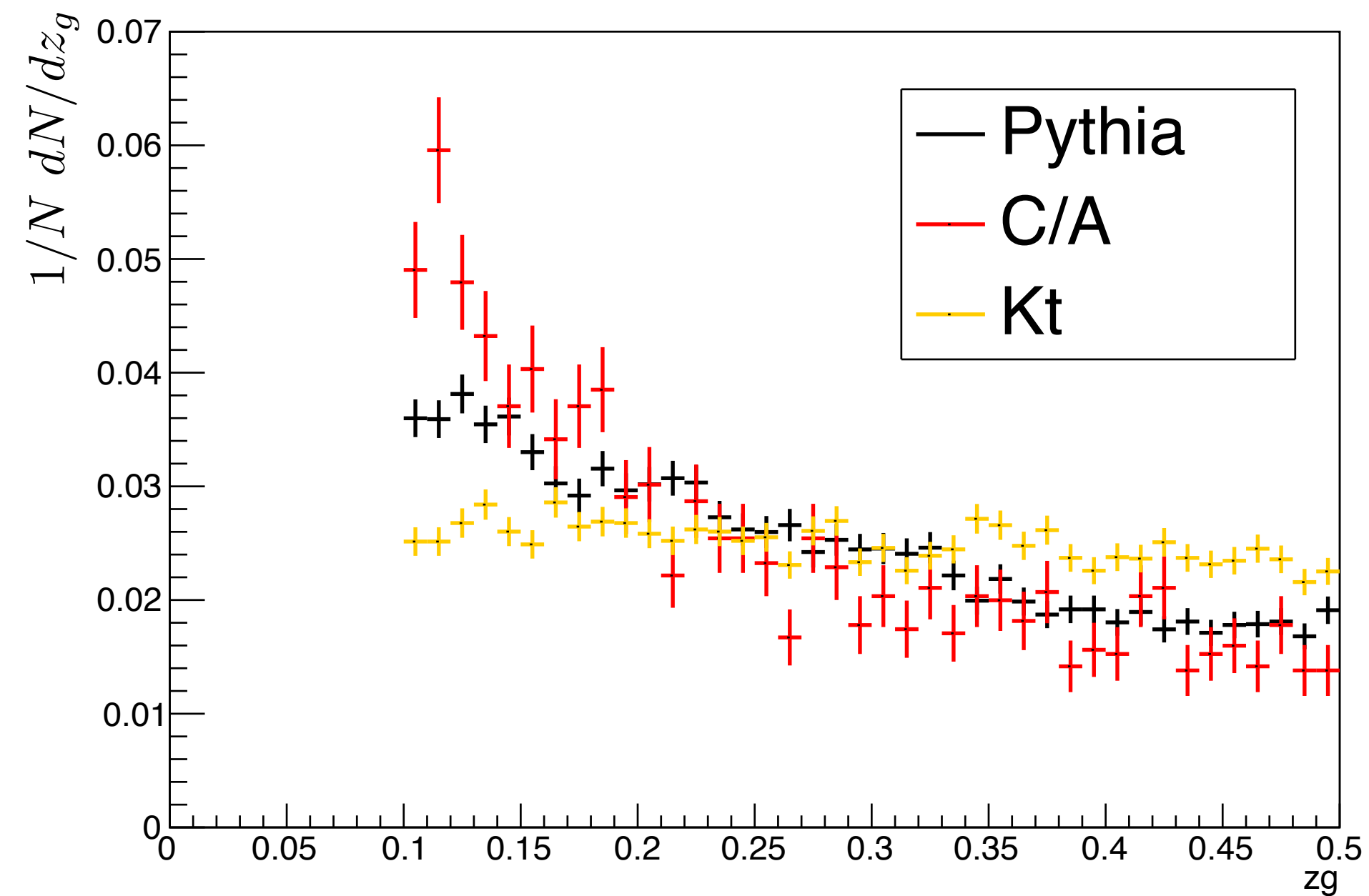


$\sqrt{s} = 5.02 \text{ TeV}$
Leading jet
 $p_t > 70 \text{ GeV}$
 $R = 0.4$
 $|\eta| < 2.0$
(parton level)

lund_lead_uncluster_kt



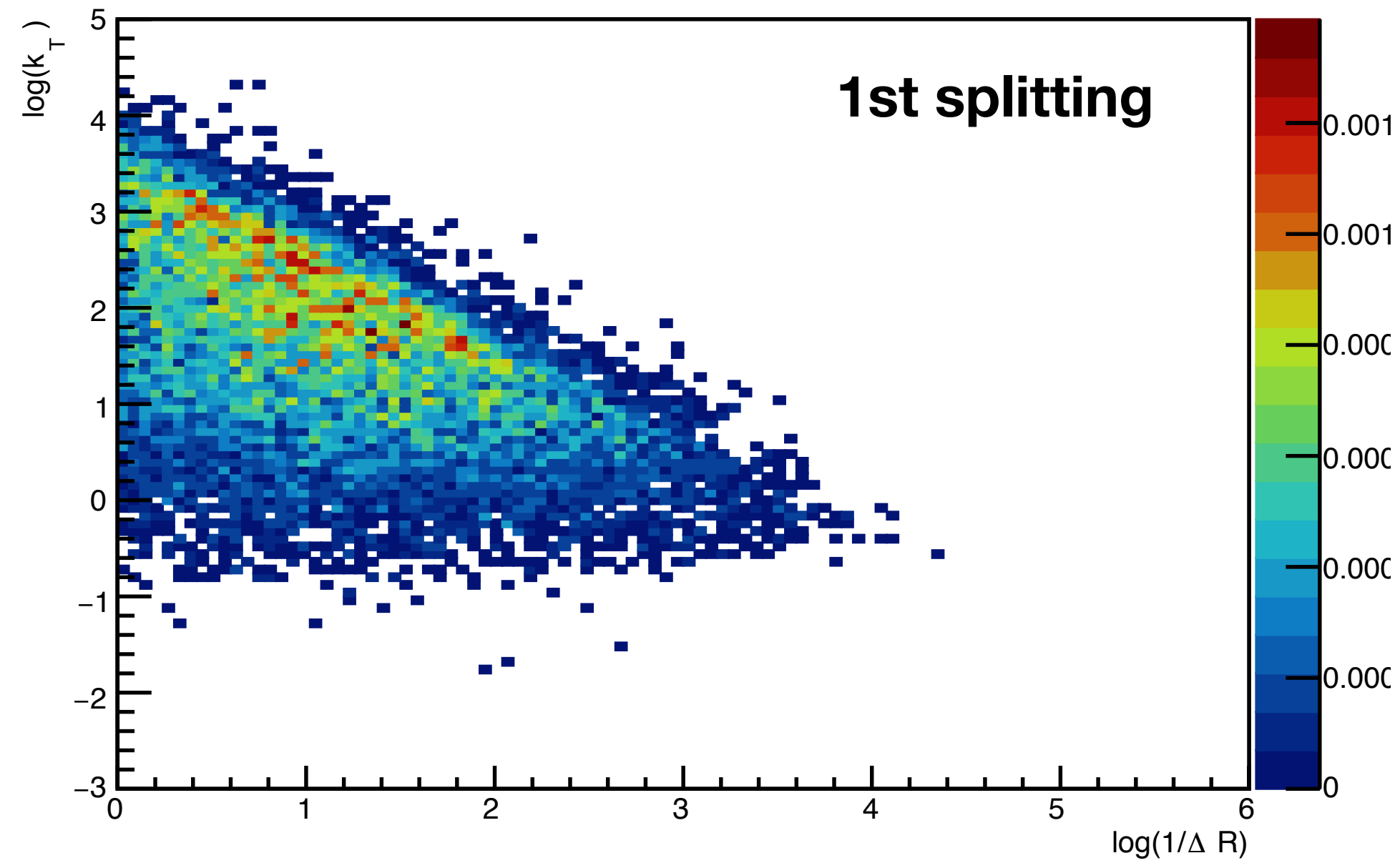
zg_lead_1stSplitting



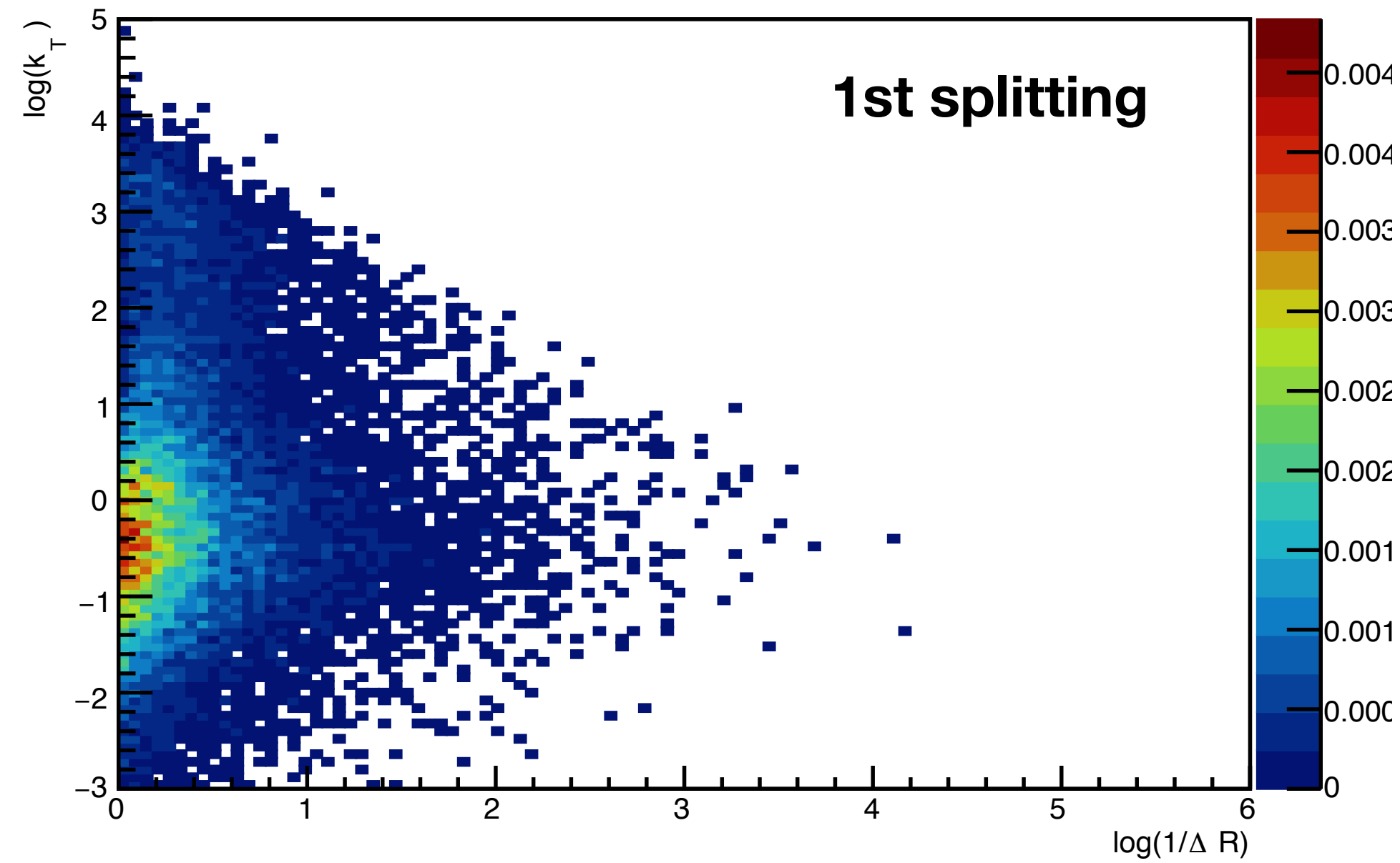
“Grooming” away very soft “1st splittings”

(Normalised distributions)

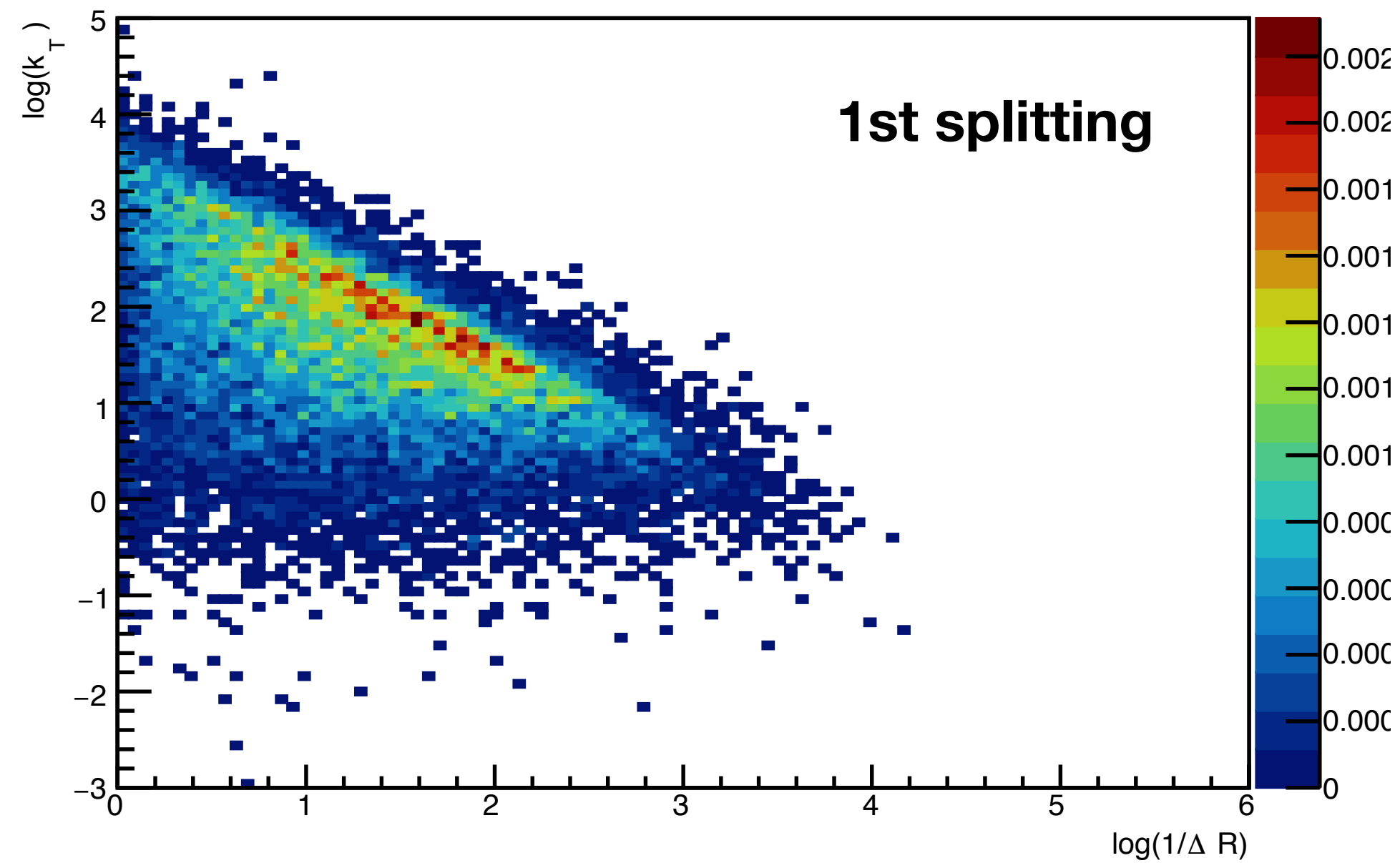
lund_lead_pythia



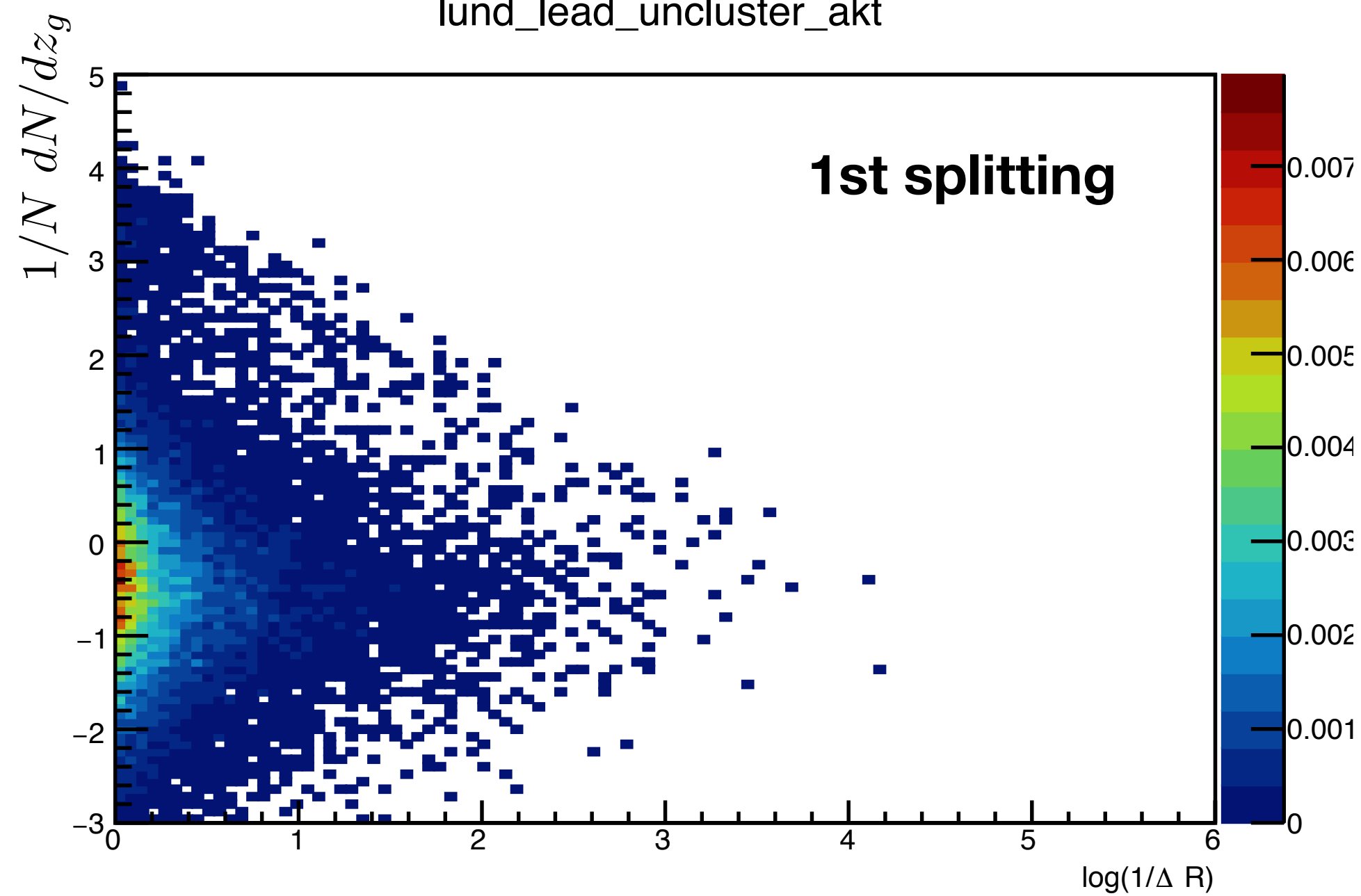
lund_lead_uncluster_ca



lund_lead_uncluster_kt

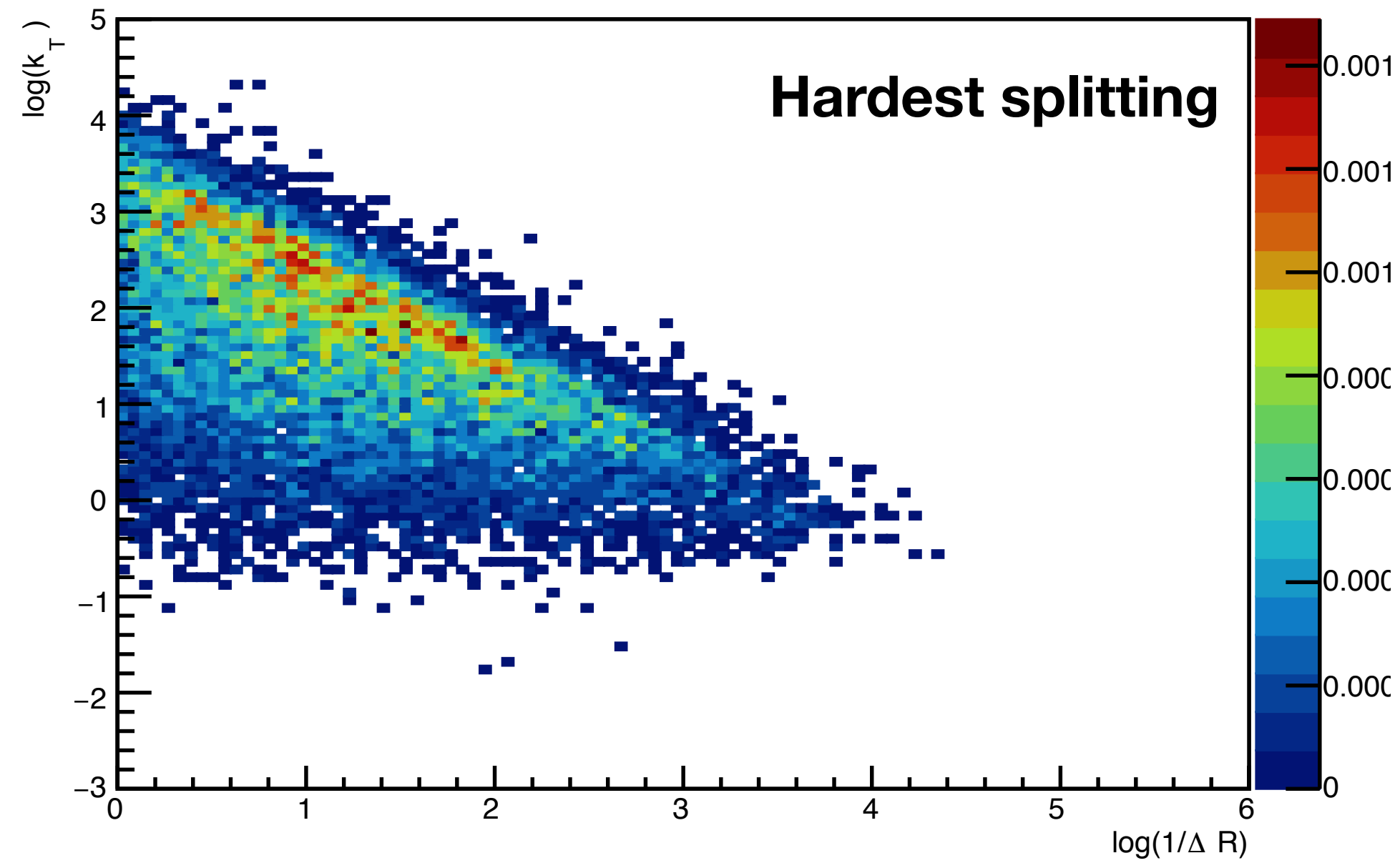


lund_lead_uncluster_akt

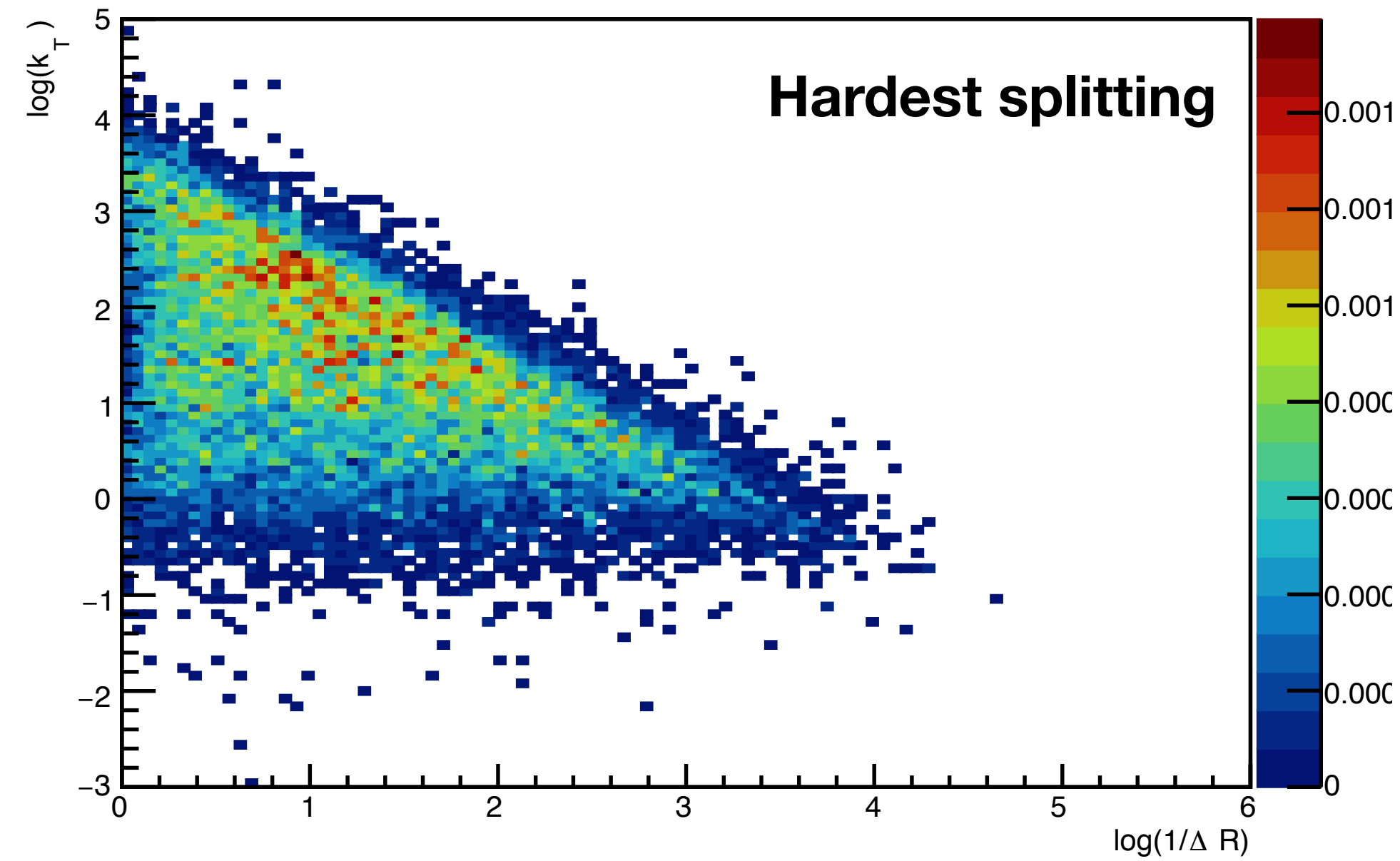


sqrt(s) = 5.02 TeV
Leading jet
pt > 70 GeV
R = 0.4
|eta| < 2.0
(parton level)

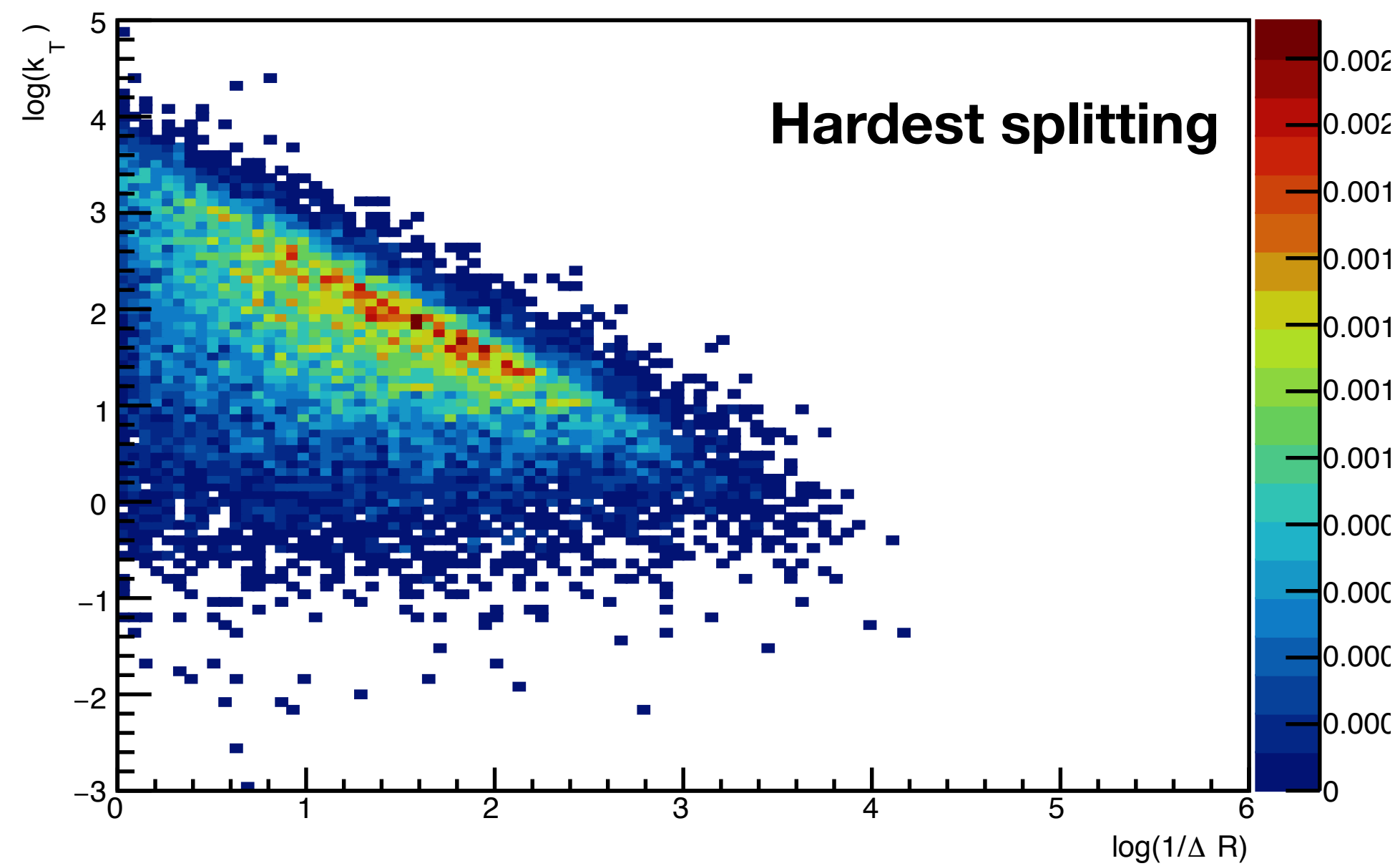
lund_lead_pythia



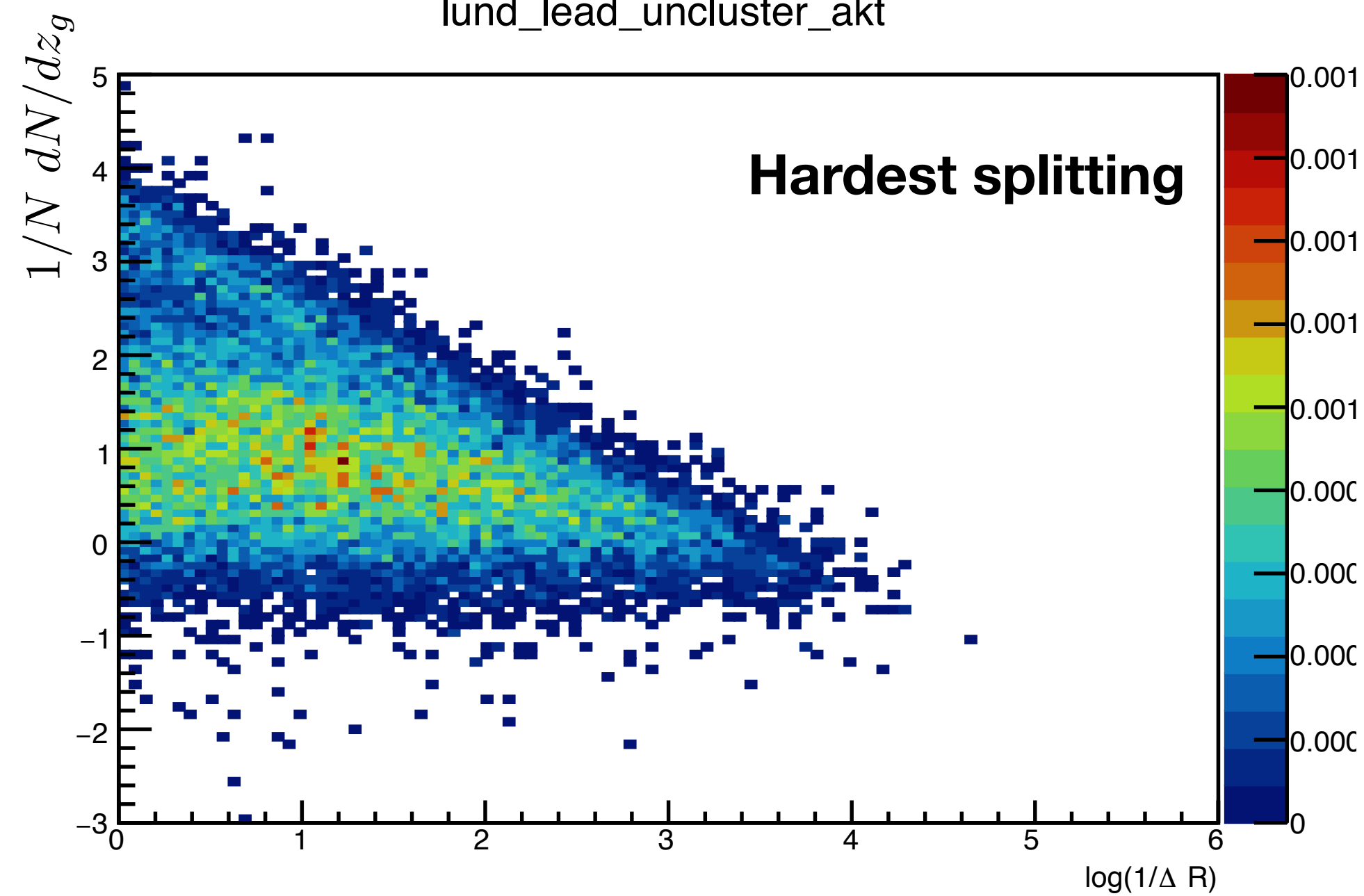
lund_lead_uncluster_ca



lund_lead_uncluster_kt

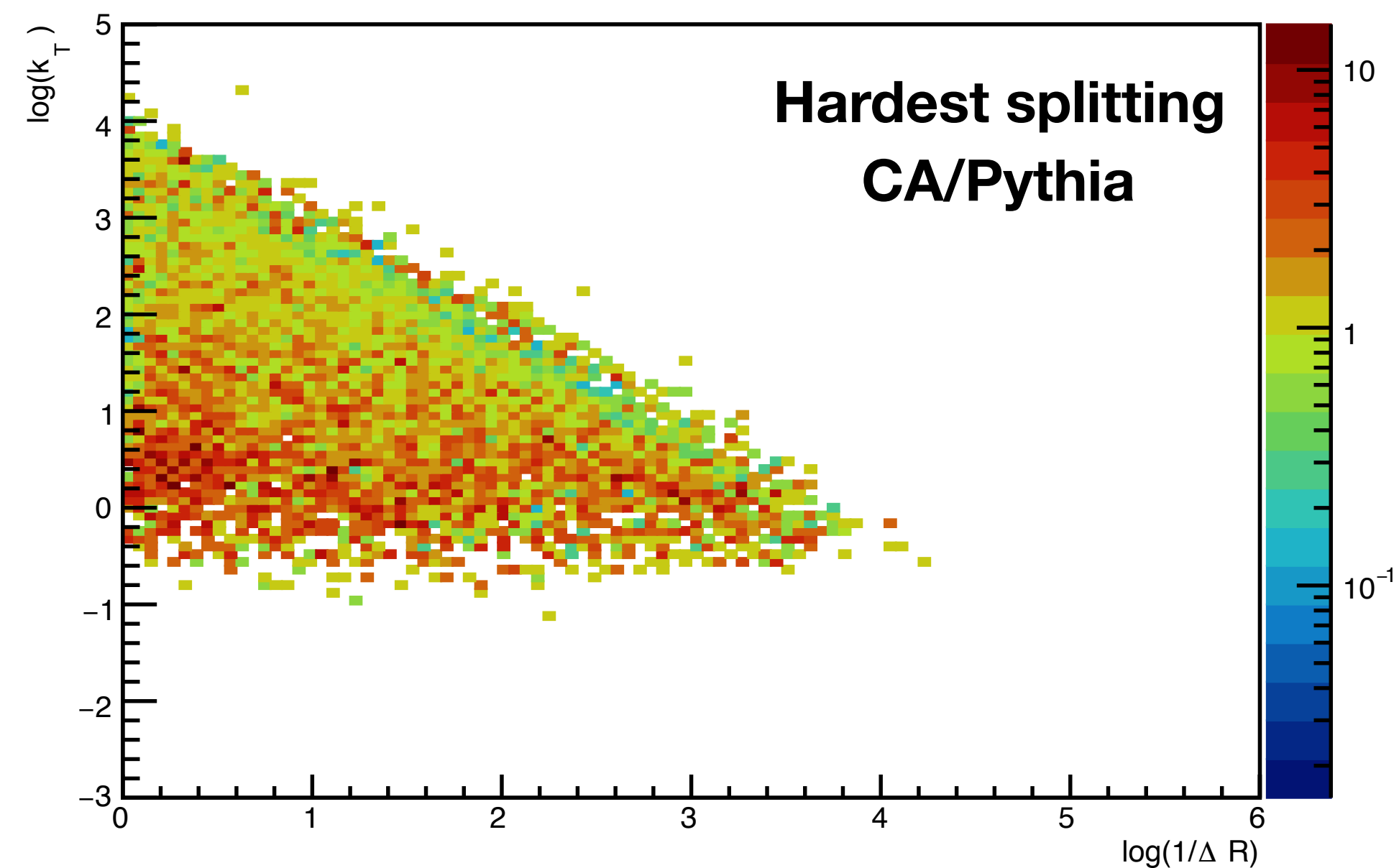


lund_lead_uncluster_akt



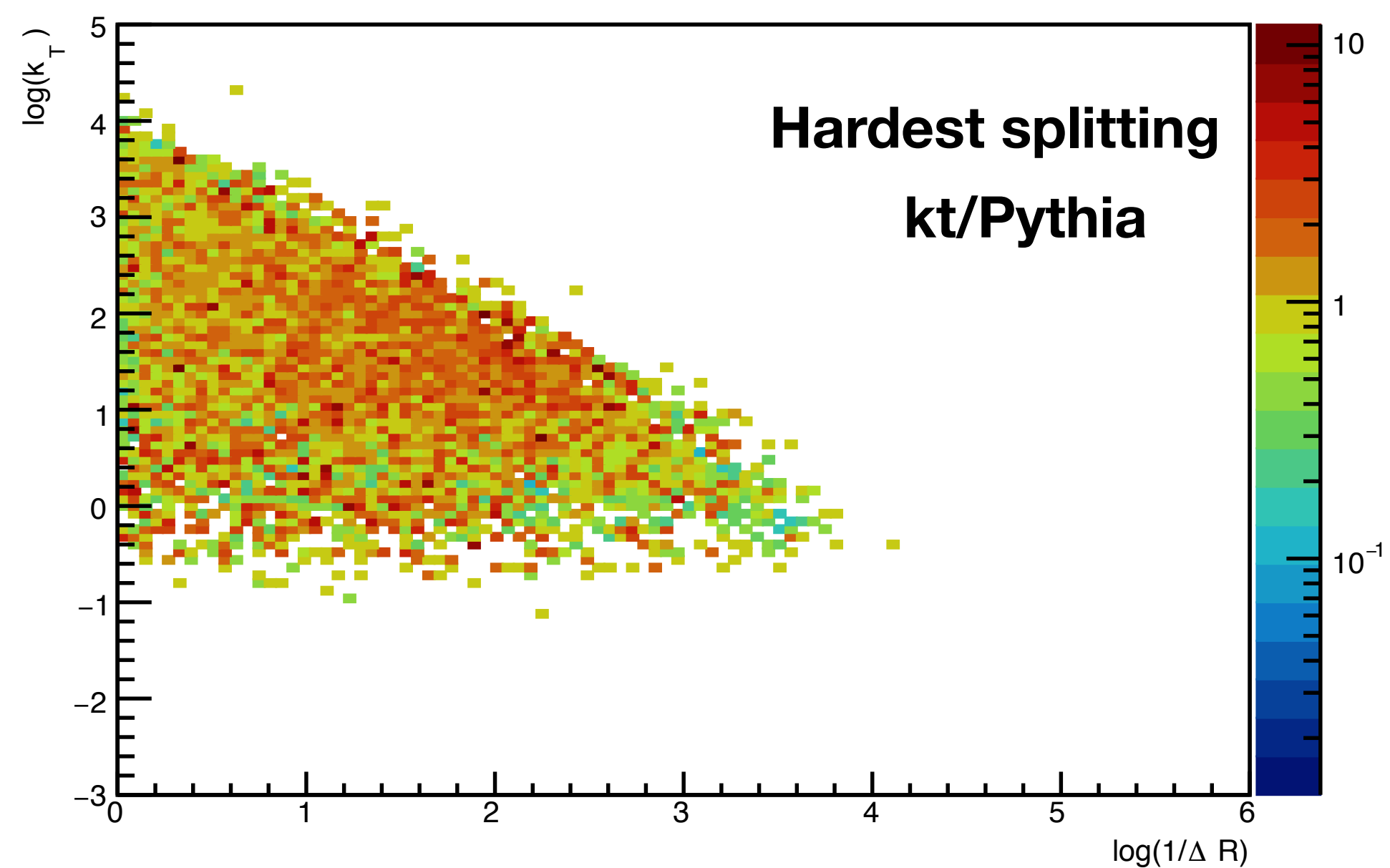
$\sqrt{s} = 5.02 \text{ TeV}$
Leading jet
 $p_t > 70 \text{ GeV}$
 $R = 0.4$
 $|\eta| < 2.0$
(parton level)

lund_lead_uncluster_ca



**$\sqrt{s} = 5.02 \text{ TeV}$
 Leading jet
 $p_T > 70 \text{ GeV}$
 $R = 0.4$
 $|\eta| < 2.0$
 (parton level)**

lund_lead_uncluster_kt



lund_lead_uncluster_akt

