(Non-conical) jet-induced shocks in the QGP

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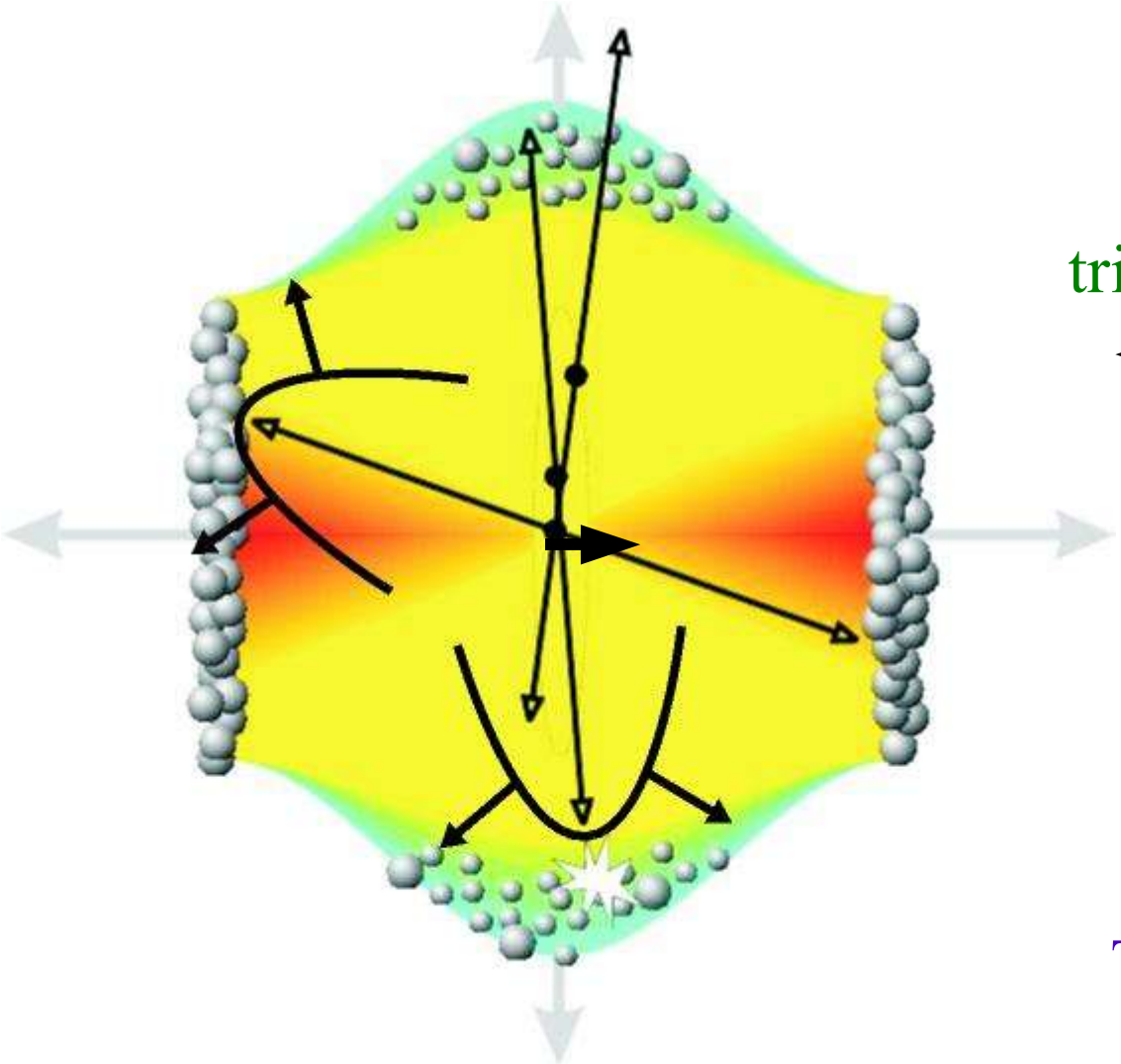
- **Stopped away-side jet can induce shock in plasma**
- **Probably no Mach cone in expanding background**
- **Plasma torn apart by shock wave -->**
  no smoldering log...

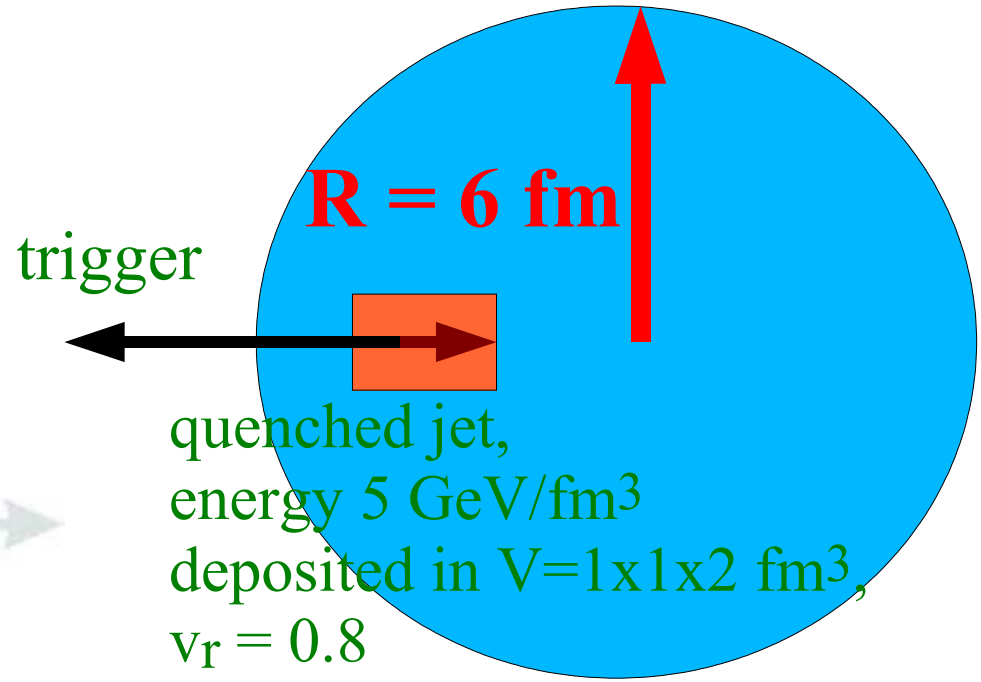
- **Dependence on plasma EoS ?**
- **pT cuts on away side ?**
- **Enhanced γ-bremsstrahlung on away side ?**
- **rotation to jet axis ?**

H.Stöcker, nucl-th/0406018: Jets in QG-Plasma=Machshocks, Wakes
PROOF OF THERMALIZED PLASMA!

Jets interact in the plasma, causing wakes and shock waves relative to jet-axis



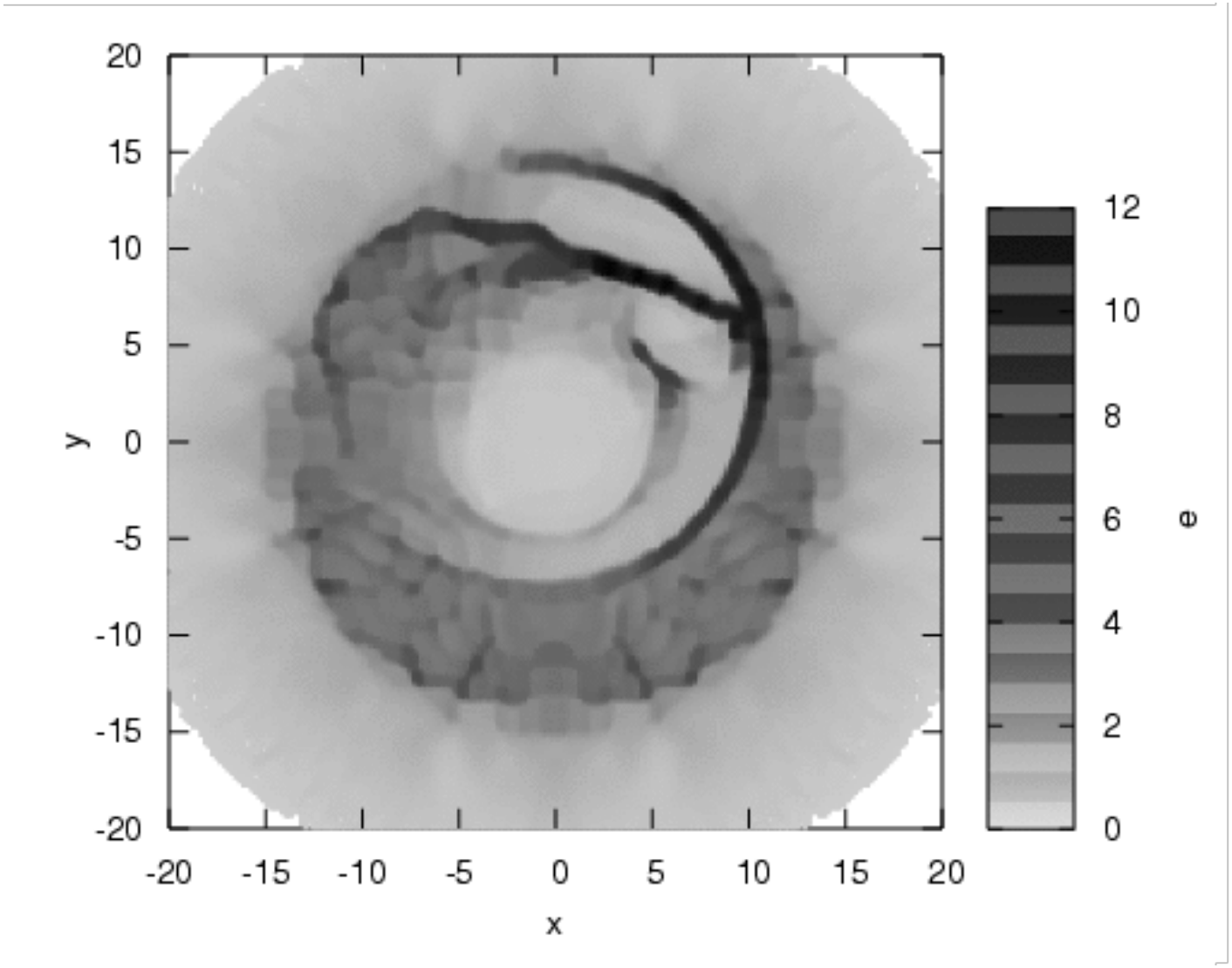
Numerical Simulations



p=e/3 or p=(e-4B)/3

$$v_i \approx 0, \quad e_i \approx 8 \; GeV / fm^3$$

$T^{0i} = (e+p)\,\gamma^2 v^i \approx 15$ GeV/fm^3 -->
$VT^{0i} \approx 30$ GeV !!



- In these simulations at least, one rather sees a “bow shock” than a Mach cone (background is not static)