

# Fluid vs Particle Velocity at $z = 15 \mu\text{m}$

Velocity ( $\mu\text{m/s}$ )

0.1  
0  
-0.1  
-0.2  
-0.3  
-0.4

0

100

200

300

$r$  ( $\mu\text{m}$ )

$$v_{\text{particle}} = v_{\text{fluid}} - D_T \frac{\partial T}{\partial r}$$

Thermophoresis opposes inward flow

but convection dominates

$v_{\text{fluid}}$  (what you currently p

$v_{\text{particle}}$  (actual particle moti

$-D_T \frac{\partial T}{\partial r}$  (thermoph

Thermophoretic reduction

data1

