

## Errata for the second (2007) printing of

### “Lattice Boltzmann Modeling” by Sukop and Thorne

19 September 2007

**P 49 to 52:** The section on "Dirichlet (Pressure) Boundaries" cites the wrong equation numbers in the text body; the equations themselves are numbered properly. Here is a list of mappings where (N) → (N') means that the currently stated equation number (N) should instead be (N'):

$$(20) \rightarrow (33)$$

$$(23) \rightarrow (36)$$

$$(22) \rightarrow (35)$$

$$(29) \rightarrow (49)$$

$$(30) \rightarrow (42)$$

**P 52:** The first sentence of the summary paragraph on page 52 should read:

"To summarize the procedure, we specify a density  $\rho_0$  at the boundary and solve for the macroscopic velocity normal to the boundary and the three unknown directional densities via four equations."

**P 52:** In Equation (44), the last 2 lines should have  $f_6$  instead of  $f_5$  as in:

$$\rho_0 v = \frac{2}{3} \rho_0 v + 2f_6 - 2f_8 - (f_1 - f_3) \Rightarrow$$

$$f_8 = f_6 - \frac{1}{2}(f_1 - f_3) - \frac{1}{6} \rho_0 v.$$

**P. 53:**

South BC should be:

$$u_{y0} = +1 - (...)$$

$$f_j[2] = f_j[4] + (...)$$

$$f_j[5] = f_j[7] + (...)$$

$$f_j[6] = f_j[8] + (...)$$

West BC should be:

$$u_{x0} = +1 - (...)$$