1002-76-130 **Traian Iliescu*** (`iliescu@math.vt.edu`), Department of Mathematics, Virginia Tech, 456 McBryde Hall, Blacksburg, VA 24061, and **Jeff Borggaard**, **Alexey Miroshnikov** and **Grant Boquet**. *Boundary Conditions for Large Eddy Simulation of Transitional Turbulent Flows.* Preliminary report.

We propose a novel boundary treatment for Large Eddy Simulation of flows with time-dependent boundary conditions. The method uses approximate deconvolution to approximate the velocity near the boundary. With these approximations and the exact value of the velocity at the boundaries, the method computes the approximation for the filtered velocity at the boundaries at the new time-step. We also present a numerical illustration of the new method. (Received September 10, 2004)