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Vishal Vasan* (vvasan@uw.edu), Department of Applied Mathematics, University of Washington, Guggenheim Hall 414, Box 352420, Seattle, WA 98195, and **Bernard Deconinck**, Department of Applied Mathematics, University of Washington, Guggenheim Hall 414, Box 352420, Seattle, WA 98195. *Well-posedness of boundary-value problems for the linear Benjamin-Bona-Mahony equation.*

A new method due to Fokas for explicitly solving boundary-value problems for linear partial differential equations is extended to equations with mixed partial derivatives. The Benjamin-Bona-Mahony equation is used as an example: we consider the Robin problem for this equation posed both on the half line and on the finite interval. For specific cases of the Robin boundary conditions the boundary-value problem is found to be ill posed. (Received August 22, 2011)