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We employ a vortex sheet model and Lagrangian particle/panel method to represent vortex sheet surface motion in 3D incompressible flow to investigate the oblique and head-on collision of vortex rings. The particles representing the sheet are advected by a regularized Biot-Savart integral with smoothed Rosenhead-Moore kernel. The particle velocities are evaluated by an adaptive hierarchical treecode algorithm based on Taylor expansions in Cartesian coordinates. The method allowed us to consider late stages of a vortex rings collision, producing individual ringlets similar to experiments. Vortex sheet approach allows us to see the details of ring's roll-up and vorticity iso-surfaces, as well as show ringlet formation behavior. (Received August 11, 2010)