

1145-35-1246

**Leonardo Abbrescia** and **Willie W-Y Wong\*** ([wongwwy@math.msu.edu](mailto:wongwwy@math.msu.edu)). *Long-time behavior of nonlinear waves near plane symmetry.*

I will report on some recent results that establish global existence and nonlinear stability of nearly simple-plane-symmetric solutions to classes of quasilinear wave equations in low spatial dimensions. These equations satisfy a strong form of null condition. This is in contrast to the case where the equations are genuinely nonlinear where it has been previously shown that nearly simple-plane-symmetric solutions always stably form shock singularities. (Received September 20, 2018)