1050-35-111Benoit Pausader* (benoit.pausader@math.brown.edu), Mathematics department, Box 1917,
Providence, RI 02912. The cubic fourth-order Schrodinger equation.

We prove that the cubic defocusing fourth-order Schrodinger equation is globally wellposed in the energy space for all dimensions below or equal to 8. For dimensions larger the equation is no longer locally wellposed. We focus mainly on the critical case n=8. (Received March 01, 2009)