1107-35-185 **Yu Deng\*** (yudeng@math.princeton.edu), Fine Hall, Princeton University, Princeton, NJ 08544. Global solutions to 3D Klein-Gordon systems.

Consider a quasilinear Klein-Gordon system

$$(\partial_t^2 - b_j^2 \Delta + c_j^2) u_j = \mathcal{N}_j(u, \partial^2 u), \qquad 1 \le j \le A$$

with a suitable symmetry assumption on the nonlinearity. We prove that, for all parameters  $(b_j, c_j)$ , the system has global solutions for small initial data. This extends a previous result of Ionescu-Pausader to allow for degenerate interactions. (Received January 14, 2015)