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## **Some Explicitly Solvable Stochastic Differential Games**

A variety of stochastic differential games are formulated and explicitly solved. The games can have two or more players and the optimal strategies determine a Nash equilibrium. The solutions use a direct method that does not require solving Hamilton–Jacobi–Isaacs equations or backward stochastic differential equations. The games include linear-quadratic with state dependent fractional Brownian motions, linear exponential quadratic with Brownian motions, and nonlinear systems with Brownian motions. The nonlinear systems can evolve in spheres (rank one compact symmetric spaces) and open unit balls (rank one noncompact symmetric spaces).