

SUPERINTEGRABLE SYSTEMS  
WITH ARBITRARY SPIN

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S u m m a r y

Superintegrable quantum mechanical systems with spin are presented. These systems admit a generalized Laplace–Runge–Lenz vector and possess the dynamical symmetry with respect to group  $SO(4)$  for bound states. Our discussion is restricted mainly to 2d and 3d systems, but a special class of arbitrary dimension systems is presented as well.