Abstract

We study little string theory on $R^1 \times S^5$, defined by a theory lives on type IIA N NS5 branes wrapped on S^5 , using its supergravity dual. This background has recently been obtained in the context of 1/2 BPS supergravity solutions. In particular we study semiclassical rotating closed strings in this background. We also consider Penrose limit of this background that leads to a plane wave on which string theory is exactly solvable.