

DIPARTIMENTO DI MATEMATICA - UNIVERSITÀ DI PISA

**NEW TRENDS IN PARTIAL DIFFERENTIAL EQUATIONS
AND APPLICATIONS**

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**Symmetry and existence results
for the CR-Yamabe equation**

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We will prove that the standard CR-Yamabe equation has infinitely many changing-sign solutions. The problem is variational but the functional fails to satisfy the Palais-Smale compactness condition; with a suitable group action we will define a subspace on which we can apply the minimax argument. The result solves a question left open from the classification of positive solutions by Jerison-Lee in the '80s.