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I. M. Isaacs* (isaacs@math.wisc.edu), Math. Dept., University of Wisconsin, 480 Lincoln Dr., Madison, WI 53706, and **Gabriel Navarro** (gabriel@uv.es). *Groups whose real irreducible characters have degrees coprime to p .*

A well-known theorem of N. Ito asserts that if G is solvable and no irreducible character of G has degree divisible by a given prime p , then G has a normal abelian Sylow p -subgroup. (The solvability requirement was later removed by G. Michler, using the simple group classification.) In this paper, we consider what happens if only the real-valued irreducible characters of G are assumed to have degrees coprime to p , where $p > 2$.

Tiep showed that in this situation, G must have a solvable normal subgroup with p' -index. We take Tiep's conclusion as a starting point, and we prove that G has a normal subgroup K of odd index such that K has a normal Sylow p -subgroup. We show, furthermore, that every real element of G normalizes some Sylow p -subgroup of G . (Received November 28, 2011)