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THE CLASSIFICATION OF SMALL COVERS UP TO D-J EQUIVALENCE

YANCHANG CHEN AND SUXIA YAO

College of Mathematics and Information Science,
Henan Normal University,
Xinxiang 453007, Henan, P. R. China

Abstract

We give one criteria for two small covers to be Davis-Januszkiewicz equivalent by the cohomology ring. Using this criteria, we show that a small cover with the same cohomology ring as $\mathbb{R}P^n \sharp \mathbb{R}P^n$ ($n \geq 3$) is Davis-Januszkiewicz equivalent to $\mathbb{R}P^n \sharp \mathbb{R}P^n$, where by $\mathbb{R}P^n$ we denote the n -dimensional real projective space.

Key Words : *Small cover, Davis-Januszkiewicz equivalent.*

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