

Left-star order structure of Rickart $*$ -rings

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Janowitz proved in 1983 that the initial segments of a Rickart $*$ -ring with the star order are orthomodular posets. We prove the same for the left-star order $* \leq$, which was introduced by Marovt et al., by finding an orthogonality relation which corresponds to $* \leq$ in a certain way (makes the ring a quasi-orthomodular poset) and then applying a result proved by Cīrulis which states that the initial segments of any quasi-orthomodular poset are orthomodular.