

## Gödel spaces and perfect MV-algebras

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It is shown that the category of Gödel spaces  $\mathbf{GS}$  (with strongly isotone maps as morphisms), which is dually equivalent to the category of Gödel algebras, is transferred by a contravariant functor  $H$  into the category  $\mathbf{MV}(\mathbf{C})^{\mathbf{G}}$  of MV-algebras generated by perfect MV-chains via direct products, subalgebras and direct limits. And, conversely, by means of a contravariant functor  $P$  the category  $\mathbf{MV}(\mathbf{C})^{\mathbf{G}}$  is transferred onto the category  $\mathbf{GS}$ . Moreover, it is shown that the functor  $H$  is faithful and the functor  $P$  is full. Furthermore, both functors are dense. The description of finite coproducts of algebras which are isomorphic to Chang's algebra is given. Using duality a description of projective algebras in  $\mathbf{MV}(\mathbf{C})^{\mathbf{G}}$  is given.