▶ JORGE I. GUIER, *Elementary equivalence for real closed domains.*
Centro de Investigación en Matemática Pura y Aplicada, Escuela de Matemática, Universidad de Costa Rica, 11501 San Pedro, San José, Costa Rica.
E-mail: jorge.guier@ucr.ac.cr.

The class of real closed rings was introduced by Niels Schwartz in the middle 80's. Examples of real closed domains well studied model-theoretically are the real closed fields and the real closed valuation rings (Cherlin-Dickmann, 80's). There are a large class of real closed domains which are not fields or valuation rings.

For a real closed domain, there is a pair of real closed fields which is interpretable in the original domain. Therefore, if two real closed domains are elementary equivalent, so they are the respective pairs of real closed fields. Under certain conditions (on maximal ideals), it is possible to prove the converse result for elementary equivalence.

Nevertheless, there are examples of real closed domains were the condition on the maximal ideals is not satisfied.