

Algebraic structures for modified realizability

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Alexandre Miquel's notion of an implicative algebra provides an elegant approach to constructing realizability triposes. When attempting to construct toposes for modified realizability, it turns out that a weakening of the notion of an implicative algebra is more suitable. In this talk I will define these "weak" implicative algebras. I will present their main properties and explain why they form a nice approach to building modified realizability toposes. Along the way I will correct a few claims I made in an online talk in CCC 2022.