

- ▶ ANDRZEJ INDRZEJCZAK, *Admissibility of Cut for Sequent Calculus related to n -labelled Tableaux*.

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The earliest sequent and tableau calculi for many-valued logics were based on the application of n -sided sequents or n -labelled formulae for each n -valued logic. This intuitively natural approach was independently proposed by many logicians in many variants based on two dual interpretations: verificationist and falsificationist. Although in the setting of two-valued logic a choice of interpretation has no effect on the shape of rules, in case of $n > 2$ values we obtain significantly different calculi. Verificationist interpretation was commonly used by proof-theoretically oriented logicians and usually formulated by means of n -sequent calculi (e.g. Rousseau, Takahashi). Also a general cut elimination theorem for this kind of calculi was provided by Baaz, Fermüller and Zach. Falsificationist interpretation was preferred by logicians focusing on proof-search and formulated usually by means of labelled tableaux (e.g. Surma, Suchoń, Carnielli). To the best of our knowledge no constructive proof of cut elimination was provided for the latter kind of calculi. We present a structured sequent calculi which may serve as an uniform framework for dealing with both approaches. The main contribution is a strategy for proving cut admissibility for the calculus based on falsificationist interpretation.