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Functorial quasi-uniformities on frames. (English summary)

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The investigations are motivated by a problem of Brümmer, who had asked for a pointfree formulation of the classical theory of functorial transitive quasi-uniformities. The authors first develop a theory of functorial quasi-uniformities on frames by means of Weil entourages and frame congruences. Then they use the pointfree version of the Fletcher construction, which they had introduced in a previous paper [Kyungpook Math. J. **44** (2004), no. 3, 415–442; [MR2095985 \(2005g:54049\)](#)], to describe all functorial transitive quasi-uniformities. The results are as expected, but require considerable technical efforts.

Reviewed by *Hans-Peter A. Künzi*

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