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Totally distributive toposes. (English summary)

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This paper gives a concrete combinatorial description of all totally distributive toposes with a small set of generators. The author achieves this characterization by establishing certain connections among the following works: [F. Marmolejo, R. D. Rosebrugh and R. J. Wood, J. Pure Appl. Algebra **216** (2012), no. 8-9, 1775–1790; MR2925871] and [R. D. Rosebrugh and R. J. Wood, Proc. Amer. Math. Soc. **122** (1994), no. 2, 409–413; MR1216823] on totally distributive categories; [F. E. J. Linton and R. Paré, in *Categorical topology (Proc. Internat. Conf., Free Univ. Berlin, Berlin, 1978)*, 196–206, Lecture Notes in Math., 719, Springer, Berlin, 1979; MR0544645], [P. T. Johnstone, F. E. J. Linton and R. Paré, in *Categorical topology (Proc. Internat. Conf., Free Univ. Berlin, Berlin, 1978)*, 207–216, Lecture Notes in Math., 719, Springer, Berlin, 1979; MR0544646] and [P. T. Johnstone and A. Joyal, J. Pure Appl. Algebra **25** (1982), no. 3, 255–296; MR0666021] on injective toposes; [G. M. Kelly and F. W. Lawvere, Bull. Soc. Math. Belg. Sér. A **41** (1989), no. 2, 289–319; MR1031753] and [C. Kennett et al., J. Pure Appl. Algebra **215** (2011), no. 5, 949–961; MR2747230] on essential localizations and essential subtoposes. *Hirokazu Nishimura*

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Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.