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**Picado, Jorge (P-CMBR)**

**Join-continuous frames, Priestley's duality and biframes. (English summary)**

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A frame is a complete lattice satisfying the infinite distributive law  $a \wedge (\bigvee b_i) = \bigvee (a \wedge b_i)$ ; further, if the dual of the distributive law holds also, the frame is called join-continuous. The author presents two representation theorems for join-continuous frames. One is in terms of certain Priestley spaces (compact totally order-disconnected spaces); it is interesting and is used to prove that the “open sets” frame of a topological space is join-continuous if and only if the space is quasidiscrete (i.e. the intersection of any family of open sets is open). Finally, the author proves that Priestley's duality can be viewed as a partialization of the dual adjunction between the categories of, respectively, bitopological spaces and biframes (for these concepts see a paper by B. Banaschewski, G. C. L. Brümmer and K. A. Hardie [*Quaestiones Math.* **6** (1983), no. 1-3, 13–25; [MR0700237 \(84h:06012\)](#)]).

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