1035-06-1481 **Alan Shuchat*** (ashuchat@wellesley.edu), Dept. of Mathematics, Wellesley College, Wellesley, MA 02481, **Randy Shull**, Dept. of Computer Science, Wellesley College, Wellesley, MA 02481, and **Ann Trenk**, Dept. of Mathematics, Wellesley College, Wellesley, MA 02481. *Fractional Weak Discrepancy, Interval Orders, and Forbidden Configurations.*

The *fractional weak discrepancy* $wd_F(P)$ of a poset $P = (V, \prec)$ is the minimum nonnegative k for which there exists a function $f : V \to \mathbf{R}$ satisfying (i) if $a \prec b$ then $f(a) + 1 \leq f(b)$ and (ii) if $a \parallel b$ then $|f(a) - f(b)| \leq k$. An $\mathbf{r} + \mathbf{s}$ is a disjoint union of two chains with r and s elements, respectively. Semiorders, which contain no induced $\mathbf{2} + \mathbf{2}$ or $\mathbf{3} + \mathbf{1}$, were characterized by their fractional weak discrepancy in Shuchat, Shull, and Trenk, *ORDER*, 23:51–63, 2006. Here we generalize this result to describe the range of values of $wd_F(P)$ based on whether or not P contains certain induced $\mathbf{r} + \mathbf{s}$ configurations. For example, we find the range of $wd_F(P)$ for interval orders with no induced $\mathbf{n} + \mathbf{1}$. (Received September 20, 2007)