Monoid $M = \langle a, b \mid ba = aa \rangle$: Upho Lattice with Core M_2

The following diagram represents the upho lattice for the monoid $M = \langle a, b \mid ba = aa \rangle$, corresponding to the case $r = 2$ of thm:rank$_t$wo. The core of this lattice is M_2.

a $\quad\quad$ abb $\quad\quad$ abb $\quad\quad$ bbb
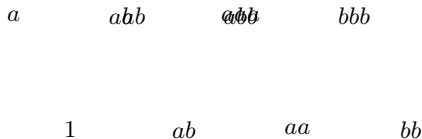
1 $\quad\quad$ ab $\quad\quad$ aa $\quad\quad$ bb

Figure 1: Upho lattice for $M = \langle a, b \mid ba = aa \rangle$ with core M_2.