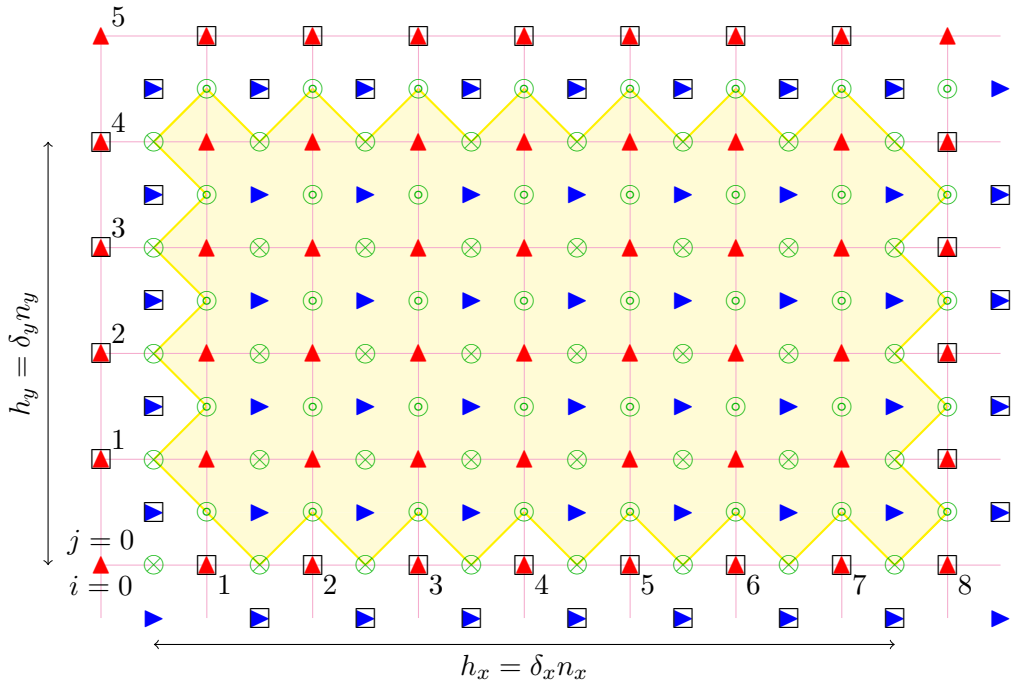

Figure 1: A patch with $n_x = 7$ and $n_y = 4$ has width $h_x = \delta_x n_x$ and height $h_y = \delta_y n_y$. The yellow region indicates the main part of the patch in which field values are determined by the elasticity differential equations. Symbols in squares $\square$, just outside the yellow region, indicate patch edge fields that are determined by interpolation. Symbols represent horizontal displacement u (▶), vertical displacement v (▲), strains $\sigma_{xx/yy}$ and stresses $\varepsilon_{xx/yy}$ (◎), and strains σ_{xy} and stresses ε_{xy} (⊗). Indices (i, j) are integer valued on the magenta grid (and red triangles), and the grid values that lie in the patch are $i = 1, 2, \ldots, n_x$ and $j = 1, 2, \ldots, n_y$.

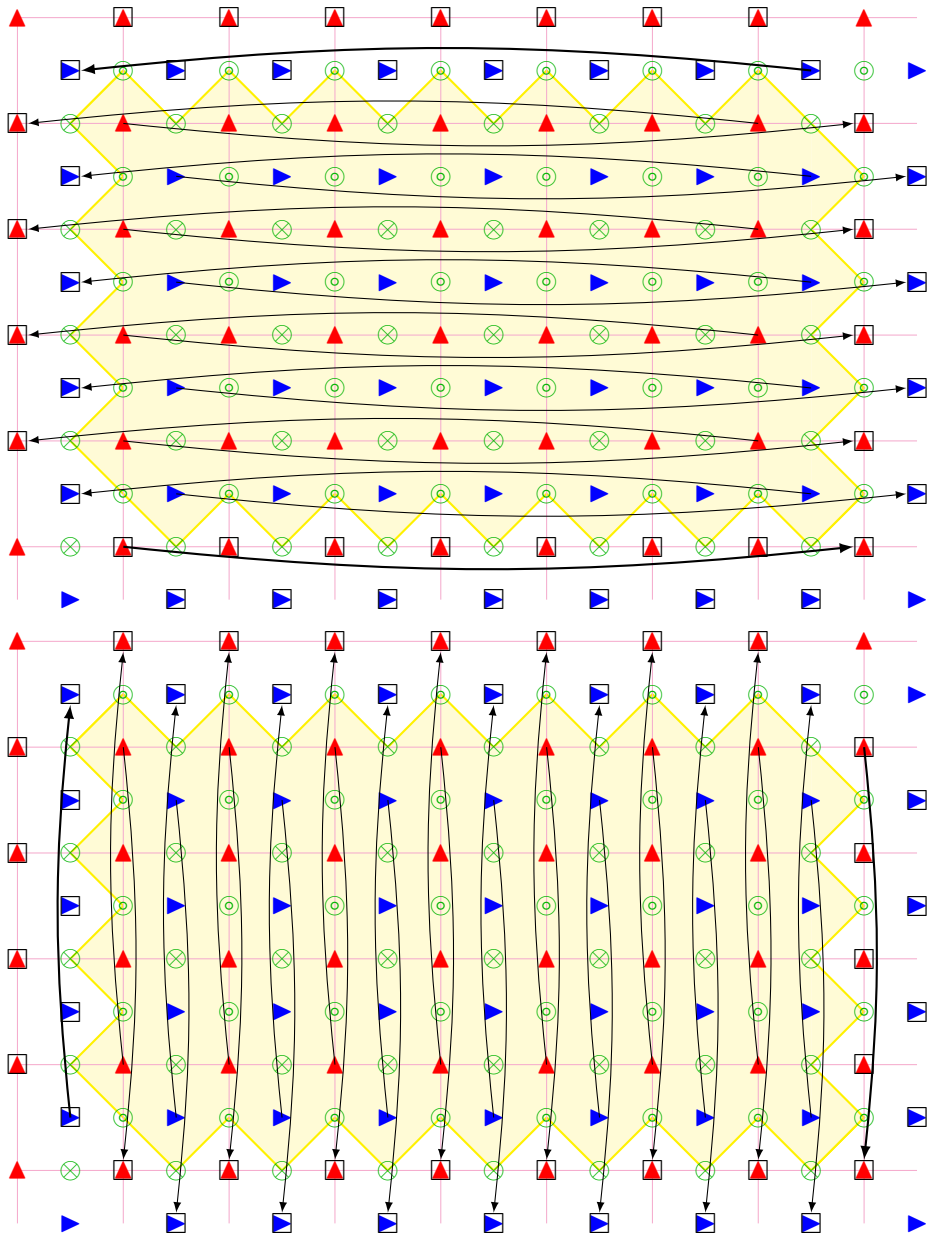

Figure 2: (top) horizonal and (bottom) vertical interpolation in a patch. Fields in squares □ outside and to the left (right) of the yellow patch are determined from horizontal interpolations of fields on the right (left) of this patch and adjacent patches, as indicated by the black arrows. Similarly, fields in squares □ outside and to the top (bottom) of the yellow patch are determined from vertical interpolations of fields on the bottom (top) of this patch and adjacent patches.[2] Two exceptions to these interpolation statements are the top-left horizontal displacement at $(0.5, 4.5)$ and the bottom-right vertical displacement at $(0, 7 + 1)$.