

A heatmap visualization of the 10x10 Hilbert matrix. The x and y axes are both labeled with indices from 0 to 9. The color scale on the right ranges from -1.0 (dark blue) to 0.0 (dark red). The diagonal elements, where  $i = j$ , are dark blue, indicating a value of -1.0. All off-diagonal elements, where  $i \neq j$ , are dark red, indicating a value of 0.0.