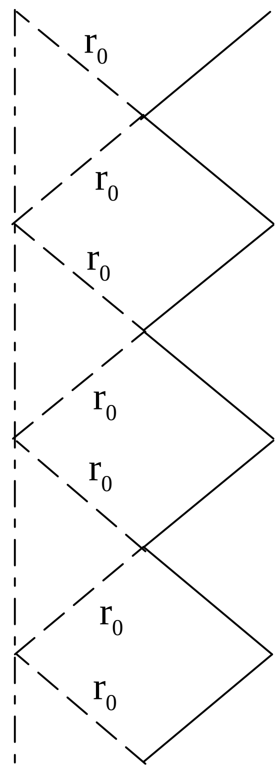

FIG. 2: The conformal diagram of the maximal extension of the extreme noncommutative inspired Schwarzschild spacetime where thin straight segments are the images of the null infinities as $r \to \infty$, dashed segments denote the event horizon at r_0 and hatched segments represent the deSitter core. As in the non extreme case we can identify the square at the bottom with the next one up.

Thus, the problem reduces to finding the signs of $g_{00}^{''}(r_0)$ and $g_{00}^{'''}(r_0)$. Using the software Maple we find the following numerical values $g_{00}^{''}(r_0) \approx 0.287$ and $g_{00}^{'''}(r_0) \approx -0.277$. This implies that the coordinate singularity r_0 is at $p = -\infty$ and $q = \infty$ when we move toward it from $r > r_0$ and at $p = \infty$ and $q = -\infty$ when we approach it from $r < r_0$, keeping in mind that these two regions will be covered by two different coordinate patches. With respect to the first coordinate patch the spatial infinity is at $p = \infty$ and $q = -\infty$. Again we can make the infinities finite by means of the transformation $p = \tan P$ and $q = \tan Q$, the nice feature of which is that we can lay the images of $r = r_0$ side by side in the two patches. With respect to the coordinate patch in the region $r > r_0$ the image of $r = r_0$ is the point with coordinates $P = -\pi/2$ and $Q = \pi/2$ whereas the choice of the coordinate patch relative to the region $r < r_0$ sends r_0 to $P = \pi/2$ and $Q = -\pi/2$. in passing we note that spacelike infinity is mapped also to the point $(\pi/2, -\pi/2)$ in the (P, Q)-plane. Putting