$$\operatorname{Tr}\left({}^{p}\Gamma H_{1}^{(p)}
ight) = E_{0}(H_{1}^{(p)})$$
 approximately N -representable
$$\operatorname{Tr}\left({}^{p}\Gamma H_{2}^{(p)}
ight) = E_{0}(H_{2}^{(p)})$$
 N -representable