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The Clairaut's theorem on rotational surfaces in pseudo-Euclidean 4-space with index 2

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Abstract: Clairaut's theorem is expressed on the surfaces of rotation in semi Euclidean 4-space. Moreover, the general equations of time-like geodesic curves are characterized according to the results of Clairaut's theorem on the hyperbolic surfaces of rotation and the elliptic surface of rotation, respectively.

Keywords: Clairaut's theorem; surfaces of rotation; pseudo-Euclidean 4-space; geodesic curve

AMS Subject Classification: 53A35, 53B30, 53B50

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