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Title: Conformal vector fields on submanifolds of a Euclidean space

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In this paper, we investigate *n*-dimensional immersed compact submanifold M of a Euclidean space  $\mathbb{R}^{n+p}$ , with the immersion  $\psi : M \to \mathbb{R}^{n+p}$ , where the tangential component  $\psi^T$  of  $\psi$  is a conformal vector field. A characterization of *n*-sphere in the Euclidean space  $\mathbb{R}^{n+p}$  is obtained. Also conditions under which  $\psi^T$  is a conformal vector field in the general case and those in the special case where the submanifold has flat normal connection and p = 2 are obtained as well.

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