

1039-53-156

Alfonso Carriazo* (carriazo@us.es), Department of Geometry and Topology, Faculty of Mathematics, University of Sevilla, Apdo. Correos 1160, 41080 Sevilla, Spain. *Examples of generalized Sasakian-space-forms.*

Recently, P. Alegre, D. E. Blair and the author defined generalized Sasakian-space-forms as those almost contact metric manifolds with a Riemann curvature tensor satisfying the usual equation for a Sasakian-space-form, but with some differentiable functions f_1, f_2, f_3 instead of the well-known constant quantities $(c + 3)/4$ and $(c - 1)/4$. Some different questions about the structure of such spaces have already been studied, as well as some problems concerning their submanifolds.

In this talk, we will offer an overview about the main examples of generalized Sasakian-space-forms. To do so, we will use some different geometric techniques, such as warped products, conformal and related transformations, or structures inherited on submanifolds. By using these tools, we can offer a wide range of new and interesting examples. (Received March 11, 2008)