

Meeting: 998, Houston, Texas, SS 20A, Special Session on Differential Geometry

998-53-254 **Laurent Meersseman** and **Alberto Verjovsky*** (`alberto@matcuer.unam.mx`). *Two results about the moduli space of smooth Levi-flat, integrable, CR-structures on the 5-sphere.*

In the talk, which presents joint work with Laurent Meersseman, we will describe the moduli space of the smooth, codimension-one, foliation by complex surfaces on the 5-sphere constructed in [2], i.e., an integrable and Levi-flat codimension one CR-structure on \mathbb{S}^5 . The underlying smooth foliation is a variation of that given by Blaine Lawson in [1], however ours is topologically different. Using the same ideas we have shown that the standard Lawson foliation on the 5-sphere cannot be endowed with an integrable CR-structure.

References

1. *Codimension-one foliations of spheres* by H.B. Lawson, Ann. of Math. 94 (1971), 494–503.
2. *A smooth foliation of the 5-sphere by complex surfaces* by L. Meersseman and A. Verjovsky, Ann. of Math. 156 (2002), 915–930.

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