

**Meeting:** 1005, Newark, Delaware, SS 12A, Special Session on Geometric Analysis

1005-53-131      **David Duchemin\*** (duchemin@math.uqam.ca), dpartement de mathmatiques, Universit du  
Qubec Montral, C.P. 8888, succursale centre ville., Montral, H3C 3P8, Canada. *Quaternionic  
contact geometry in dimension 7.*

The conformal infinity of a quaternionic-Kähler metric on a  $4n$ -manifold with boundary is a codimension 3 distribution on the boundary called quaternionic-contact. In dimension  $4n-1$  greater than 7, a quaternionic contact structure is always the conformal infinity of a quaternionic-Kähler metric. On the contrary, in dimension 7, we prove a criterion for quaternionic contact structures to be the conformal infinity of a quaternionic-Kähler metric. (Received February 04, 2005)