

**CCSU**  
**DEPARTMENT OF MATHEMATICAL SCIENCES**

# COLLOQUIUM

Friday, September 22  
2:00 – 3:00 PM  
Maria Sanford, Room 101

## **NEW APPLICATIONS OF THE HESSIAN – WEITZENBOCK FORMULA**

**NELSON CASTANEDA**

**CENTRAL CONNECTICUT STATE UNIVERSITY**

The Hessian-Weitzenbock formula was introduced in the presenter's thesis in connection to a simple proof of the Hessian comparison theorem. In this talk we will discuss how this formula can be used to obtain a relatively simple proof of Obata's theorem that says that a compact manifold that carries a function whose Hessian is proportional to the metric, is isometric to a round sphere.

**AFTERMATH:**

**Refreshments will follow the colloquium at Castaneda's  
(1590 Stanley St. – across from the administration building)**

***For further information:***

[gotchevi@ccsu.edu](mailto:gotchevi@ccsu.edu) 860-832-2839  
[castanedan@ccsu.edu](mailto:castanedan@ccsu.edu) 860-832-2851