A REMARK ON THE AREA OF A SURFACE

CARLOS BIASI, LUIZ A.C. LADEIRA and SANDRA M.S. GODOY

Abstract. In this paper we present a formula for the computation of the area of a surface, which is a kind of curvilinear Fubini's formula (Theorem 2). Such a formula relates the area of a surface with the integral of the *period map* of an ordinary differential equation on that surface. Some applications are given. We use technics of differential equations but this result can also be proved by using the coarea theorem.

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ICMC-USP, Departamento de Matemática
Caixa Postal–668
13560-970 São Carlos- SP, Brazil
E-mail: biasi@icmc.sc.usp.br
E-mail: ladeira@icmc.sc.usp.br
E-mail: smsgodoy@icmc.sc.usp.br