

**Biquard, Olivier****The Seiberg-Witten equations on a non Kähler complex surface. (Les équations de Seiberg-Witten sur une surface complexe non Kählérienne.)** (French. English summary) [Zbl 0978.53121](#)  
*Commun. Anal. Geom.* 6, No. 1, 173-197 (1998).

Summary: We consider the Seiberg-Witten invariants of non Kähler complex surfaces with  $b_2^+ > 0$ . They are all elliptic surfaces of nonnegative Kodaira dimension. We prove that they are of simple type and we calculate the basic classes and the multiplicities. We deduce that non Kähler properly elliptic surfaces do not carry a symplectic structure.

**MSC:**[53D05](#) Symplectic manifolds (general theory)[57R57](#) Applications of global analysis to structures on manifolds[53C56](#) Other complex differential geometryCited in **1** ReviewCited in **5** Documents**Keywords:**

Seiberg-Witten invariants; complex surfaces; elliptic surfaces; nonnegative Kodaira dimension; symplectic structure

**Full Text:** [DOI](#)