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## Measuring the Instability of a Reducible Critical point of the Seiberg-Witten Functional

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The instability of the reducible critical points  $(A, 0)$  of the Seiberg-Witten functional is studied by analysing the lowest eigenvalue of the elliptic operator  $L_A = \Delta_A + \frac{k_g}{4}$ . A short resume about the existence and relevance of SW-monopoles is given and also how geometrical structures on a 4-manifold  $X$  plays an important role to the theory.

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