## ICM 1998, Berlin, Aug. 18–27

## Abstracts of Short Communications and Posters

### Section:

## 9. Ordinary Differential Equations and Dynamical Systems

1991 MS Classification: 34, 47
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**Stability in semilinear problems**

In the paper, we derive results concerning a continuous dependence of solutions on the right-hand side for a semilinear operator equation $Lu = \nabla g(u)$, by assuming that $L : D(L) \subset H \to H$ ($H-$a Hilbert space) is self-adjont, with a closed range, and $g : H \to R$ is continuous convex on $H$ and Gâteaux differentiable on $D(L)$. Using these results, we obtain theorems on the continuous dependence of solutions on functional parameters for a semilinear problem of the second order $\ddot{u} + au = D_u F(t, u, \omega),\ t \in [0, \pi]\ a.e.$, with the Dirichlet boundary conditions $u(0) = u(\pi) = 0$, where $a \geq 1$, and $\omega$ is a functional parameter.