

# Continuity of the flows and upper semicontinuity of global attractors for $p_s(x)$ -Laplacian parabolic problems

Simsen, J.<sup>a</sup>, Simsen, M. S.<sup>a</sup> and Primo, M. R. T.<sup>b</sup>

<sup>a</sup> Departamento de Matemática e Computação - Universidade Federal de Itajubá, 37500-903 - Itajubá - Minas Gerais - Brazil. e-mail: jacson@unifei.edu.br, mariza@unifei.edu.br

<sup>b</sup> Universidade Estadual de Maringá, 87020-900 - Maringá - Paraná - Brazil. e-mail: mrtprimo@uem.br

In this work we prove continuity of solutions with respect to initial conditions and exponent parameters and we prove upper semicontinuity of a family of global attractors for one-dimensional problems of the form

$$\frac{\partial u_s}{\partial t} - \frac{\partial}{\partial x} \left( \left| \frac{\partial u_s}{\partial x} \right|^{p_s(x)-2} \frac{\partial u_s}{\partial x} \right) = B(u_s)$$

where  $B$  is a globally Lipschitz map,  $p_s(\cdot) \rightarrow p$  in  $L^\infty(I)$  ( $I := (c, d)$  and  $p > 2$  constant) as  $s$  goes to infinity.

**Acknowledgements:** This work was partially supported by the Brazilian research agency FAPEMIG grant CEX-APQ-04098-10.

## Referências

- [1] J. Simsen, M. S. Simsen, M. R. T. Primo, *Continuity of the flows and upper semicontinuity of global attractors for  $p_s(x)$ -Laplacian parabolic problems*, submitted preprint (2012).