

## ERRATA AND ADDENDA

**Symmetry and Perturbation Theory  
in Nonlinear Dynamics  
Lecture Notes in Physics – Volume m57  
ISBN 3-540-65904-8**

*Giampaolo Cicogna and Giuseppe Gaeta*

© Springer-Verlag Berlin Heidelberg 1999

- (1) A trivial error slipped in page 12: the limit in formula (14') is obviously wrong.
- (2) A more subtle point should be mentioned concerning section VIII.6: the computation there does actually make use of an additional Lie algebraic structure, not considered in the general discussion (and not always present in general). Although the result of the computation are correct, the computation does not follow the scheme discussed in previous sections. This matter is discussed in detail in [1], where the theory is also extended to take into account additional Lie algebraic structures when present.
- (3) After this volume was published, we have applied methods and results discussed here to the "resonant bifurcation"; see [2].
- (4) Several papers appearing in the proceedings of the SPT2001 conference [3] and some of the tutorial papers prepared for it [4] will also be of interest to readers of this volume (the proceedings of the previous SPT conference were reference 109 in the volume).

### References

- [1] G. Gaeta, "Algorithmic reduction of Poincaré-Dulac normal forms and Lie algebraic structure"; *Lett. Math. Phys.* **57** (2001), 41-60
- [2] G. Cicogna, "Resonant bifurcations", *J. Math. Anal. Appl.* **241** (2000), 157-180; "Convergent normal forms, symmetries, and applications to bifurcations", *Dynamics of Continuous, Discrete and Impulsive Systems A* **8** (2001), 613-626
- [3] D. Bambusi, G. Gaeta and M. Cadoni (eds.), *Symmetry and Perturbation Theory* (Proceedings of the international conference SPT2001, Cala Gonone 6-13 May 2001), World Scientific (Singapore) 2001
- [4] Published in *Acta Applicandae Mathematicae*, Volume **70** (2002) (issues 1-3)

Symmetry and Perturbation Theory in Nonlinear  
Dynamics

Cicogna, G.; Gaeta, G.

1999, XI, 212 p., Hardcover

ISBN: 978-3-540-65904-4