



Figure 26: Frame equilibrium paths  $P$  vs.  $v_{\bar{y}}$  (points  $R_1, R_2, R_3$ ) and ANSYS deformed configuration ( $P=23$  kN).



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See:

[http://ceris.pt/?action=employee\\_detail\\_modal&CodColaborador=824](http://ceris.pt/?action=employee_detail_modal&CodColaborador=824)

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#### Research Interests:

Thin-walled members; Stability and vibration; Generalized Beam Theory (GBT); Cold-formed steel members

#### Selected Publications:

Silvestre, N., Bebiano, R., and Camotim, D. (2005). On the distortional post-buckling asymmetry of cold-formed steel channel columns with different stiffener configurations. In Proceedings of Structural Stability Research Council 2005 Annual Stability Conference (SSRC 2005 – Montréal, 06-09/04), pages 63–88. 2.1.6  
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Camotim, D., Silvestre, N., Dinis, P., Bebiano, R., and Basaglia, C. (2006a). Recent progress in the numerical analysis of thin-walled steel members and frames. In Proceedings of International Symposium on Innovative Design of Steel Structures, B. Young (Editor), (Hong Kong, 10/11), pages 63–104. 2.1.6

Bebiano, R., Silvestre, N., and Camotim, D. (2007). GBT formulation to analyze the buckling behavior of thin-walled members subjected to non-uniform bending. *International Journal of Structural Stability and Dynamics*, 7(1):23–54. 2.1.6

Bebiano, R., Pina, P., Silvestre, N., and Camotim, D. (2008a). GBTUL – Buckling and vibration analysis of thin-walled members. Technical report, DE-Civil/IST, Technical University of Lisbon, (<http://www.civil.ist.utl.pt/gbt>). 3, 5.4

Bebiano, R., Silvestre, N., and Camotim, D. (2008b). GBTUL – A code for the buckling analysis of cold-formed steel members. In Proceedings of 19th International Specialty Conference on Recent Research and Developments in Cold-Formed Steel Design and Construction, R. LaBoube, W.-W. Yu (Editors), St. Louis, 14-15 October, pages 61–79. 2.1.6

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D. Camotim, N. Silvestre, C. Basaglia and R. Bebiano, “GBT-based buckling analysis of thin-walled members with non-standard support conditions”, *Thin-Walled Structures*, Vol.46, Nos. 7-9, July-September 2008, pp. 800-815

Bebiano, R. (2009). *Stability and Dynamics of Thin-Walled Members*. PhD thesis, Technical University of Lisbon. 2.1.6

D. Camotim, C. Basaglia, R. Bebiano, R. Goncalves and N. Silvestre. Latest developments in the GBT analysis of thin-walled steel structures. *Proc. Int. Coll. Stability and Ductility of Steel Struct.*, Rio de Janeiro, Brazil, E. Batista, P. Vellasco and L. Lima (eds.), 33–58, 2010.

Rui Bebiano, Dinar Camotim and Nuno Silvestre, “Dynamic analysis of thin-walled members using Generalized Beam Theory (GBT)”, *Thin-Walled Structures*, Vol. 72, pp 188-205, November 2013

Bebiano R, Camotim D and Goncalves R (2014) GBTUL 2.0 – a new/improved version of the GBT-based code for the buckling analysis of cold-formed steel members. In: 22nd international specialty conference on cold-formed steel design and construction, St Louis, MO, 5–6 November, pp. 1–20. Rolla, MO: Missouri University of Science and Technology.

Rodrigo Goncalves, Rui Bebiano and Dinar Camotim, “On the shear deformation modes in the framework of generalized beam theory”, *Thin-Walled Structures*, Vol. 84, pp 324-334, November 2014

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Rui Bebiano, Moshe Eisenberger, Dinar Camotim and Rodrigo Goncalves, “GBT-based buckling analysis using the exact element method”, *International Journal of Structural Stability and Dynamics*, Vol. 17, No. 10, December 2017

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R. Bebiano, D. Camotim and R. Goncalves, “GBTul2.0 – A second-generation code for the GBT-based buckling and vibration analysis of thin-walled members”, *Thin-Walled Structures*, Vol. 124, pp 235-257, March 2018

Rui Bebiano, Moshe Eisenberger, Dinar Camotim and Rodrigo Goncalves, “GBT-based vibration analysis using the exact element method”, *International Journal of Structural Stability and Dynamics*, Vol. 18, No. 5, May 2018