
Oral Presentation

SOLVING SOME OF LAMÉ'S PROBLEMS USING GEOMETRIC SOFTWARE

Maria Zoraide Martins Costa Soares, Otília Terezinha Wiermann Paques, Rosa Maria Machado & Douglas Daniel

Instituto de Matemática, Estatística e Computação Científica
Laboratório de Ensino de Matemática

The mathematics teaching laboratory (LEM/UNICAMP), Brazil, currently has as aim to research the use of history of mathematics in teaching, using geometry software. This paper concerns two problems of the French mathematician Gabriel Lamé (1795-1870) with solutions using geometry software. We can find these problems in the book *Examen des diferentes methodes employées pour résoudre les problèmes de géometrie* (Paris-1818).

The view of Lamé for the problems was only algebraic. With the geometry software, we have dynamic solutions that complete the Lamé's solution and brings us a global analysis by means of the movement. These new view of the problem take us to add real conditions for Lamé's solutions.

References

- Lamé, G. (1818). *Examen des diferentes methodes employées pour résoudre les problèmes de géometrie*. France: M. Y Courcier. Available: <http://gallica.bnf.fr/ark:/12148/bpt6k92728m>. Accessed on 12 February 2013.
- Lamé, G. (2013). *Biografies: Mac Tutor Biography*. Availabel:<http://www-history.mcs.st-andrews.ac.uk/Biographies/Lame.html>. Accessed on 10 March 2013.
- Barbin, E. (2009). *L'association créatrice de l'analyse et de la géométrie selon Gabriel Lamé*, France: Bulletin de la Sabix. Available: <http://sabix.revues.org/644>. Accessed on 28 August 2013.
- GeoGebra5: Markus Hohenwarter, 2013. <http://www.geogebra.org>
- Geometry Expressions v3.1 - Saltire Software, 2013. <http://www.geometryexpressions.com/>