

*This is a review submitted to Mathematical Reviews/MathSciNet.*

**Reviewer Name:** de Paz, María

**Mathematical Reviews/MathSciNet Reviewer Number:** 127139

**Address:**

Dep. de Filo., Log. y Filo. de la Cien.  
Fac. de Filosofía, Univ. of Sevilla  
C/Camilo José Cela S/N  
41018 Seville  
SPAIN  
maria.depaz@hotmail.com

**Author:** Pereira da Silva, Clovis

**Title:** Consolidation of research in mathematics in Brazil.

**MR Number:** MR4425565

**Primary classification:** 01A72

**Secondary classification(s):**

**Review text:**

This paper presents a history and state of the art of mathematics in Brazil from 1940 to nowadays. It refers the main areas of mathematical work, the principal persons and institutions. The history presented is relevant and interesting, since it shows the crucial elements for the consolidation of an important mathematical community. It shows how from the beginning, research stays in some of the best universities in the world were encouraged and how also Brazil attracted foreign mathematicians that formed some of the best Brazilian members of this community. Among them we can highlight members of the Bourbaki group, such as Andre Weil, who worked at Sao Paulo University (USP). There is, in particular since the 1960s, a continual flux of students and professors going abroad and coming back to Brazil to train new generations of mathematicians. They also created post-graduate programs and prestigious institutions such as the IMPA (Instituto de Matematica Pura e Aplicada), which nowadays stands out among the best research places for mathematicians in the world. It was in the IMPA where the prestigious Brazilian school of dynamical systems was constituted and where important theorems such as the Peixoto theorem were proved. Also, the establishment of a Brazilian Colloquium of Mathematicians helped in the consolidation of a community all along the country. This Colloquium is nowadays organized by the IMPA and it gathers together more than one thousand students and researchers in mathematics, from Brazil and abroad.

The community consolidated several research groups in mathematics that in 2016 constituted the 2,35 percent of the mathematical publications of the world

and Brazil is classified in the group 5 of the International Mathematics Union (IMU), the same group of Canada, China, USA, France and Russia, among others. There is also one Fields Medalist, Artur Avila (2014), and several other world-famous researchers.

All in all, it is a history of success, in spite of the fact that in Brazil there was never a federal plan for the development of universities, as the author points out at the end of the paper.

The paper has several typos and sometimes it is tedious to read, since at some points it is just name dropping of persons and mathematical areas. This kind of research is, however, important to understand how a developing country like Brazil can attain such high level in a field of research.

**Comments to the MR Editors (not part of the Review Text):**

As usual, accents are impossible to introduce. I write the correct forms here  
Andr Weil So Paulo University Instituto de Matemtica Pura e Aplicada