



MAT80

XIII Workshop on Dynamical Systems Celebrating the 80th birthday of Marco Antonio Teixeira

IMECC/Unicamp – November 25-29, 2024

Campinas/SP – Brazil

<http://www.ime.unicamp.br/~mat80/>

Certificate

We hereby certify that **Jeroen Lamb** presented the plenary talk entitled *Bifurcations in random dynamical systems* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

Campinas, November 29th, 2024.

Ricardo Miranda Martins
On behalf of the Organizing Committee



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We hereby certify that **Armengol Gasull** presented the plenary talk entitled *Different viewpoints about Hilbert's 16th problem* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Mike Jeffrey** presented the plenary talk entitled *Catastrophe theory for modern mathematical modelling* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Freddy Dumortier** presented the plenary talk entitled *A systematic study of multi-layer canard cycles* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Daniel Panazzolo** presented the plenary talk entitled *Solutions of the equation $a_n + (a_{n1} + (a_2 + (a_1 + x^{r_1})^{r_2})^{r_n} = bx$* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Colin Christopher** presented the plenary talk entitled *Liouvillian Integrability of Higher Dimensional Systems* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Tere Seara** presented the plenary talk entitled *Unstable motions in the three body problem* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Jaume Llibre** presented the plenary talk entitled *Hopf bifurcation of limit cycles surrounding a node* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Enrique Ponce** presented the plenary talk entitled *On complex normal forms for the double boundary focus* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Miriam Manoel** presented the plenary talk entitled *Involutions at the crossroads of singularities and dynamics* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Ketty Abaroa de Rezende** presented the plenary talk entitled *The Algebra behind the Dynamics of Isolated Invariant Sets* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Lorenzo Díaz** presented the plenary talk entitled *A conservative dilemma: to be or not to be (hyperbolic)* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Clodoaldo Ragazzo** presented the plenary talk entitled *Global normalizations for centers of planar vector fields* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Antonio Teruel** presented the plenary talk entitled *Slow passage through a homoclinic bifurcation by PWL differential systems* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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We hereby certify that **Fernando Fernández Sánchez** presented the mini-course entitled *Integral characterization and its applications to limit cycles of planar piecewise linear systems* at the XIII Workshop on Dynamical Systems (MAT80) - *Celebrating the 80th birthday of Marco Antonio Teixeira*, held at Universidade Estadual de Campinas (UNICAMP), Campinas, Brazil, from November 25th to November 29th, 2024.

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