# Ahmed Zeriahi: A great mathematician and a faithful friend

Christer Oscar Kiselman

Toulouse 2020 June 08—12 ... Non !

2020 September 07—11 ... Non !

2021 May 31 — June 04 ... Oui !

2021-05-31 17:00-17:30

Version of 2021-05-20

2021zeriahi

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#### Abstract

I will go back thirty-eight years in time, give you an idea of Ahmed's achievements, and tell you about some of the many contacts and interchanges we have had over these years.

#### Plan

Ahmed: speaker Ahmed: researcher Many coauthors Important prizes A remarkable career Ahmed in Sweden four times: 1984, 1990, 2008, 2015 Ahmed *docteur* 1986 Ahmed Faculty Opponent for Xiaoqin Wang 1990 Acta Mathematica 2000 and Crelle's journal 2013 Christer in Toulouse Conclusion

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#### Ahmed Zeriahi: speaker

Ahmed speaks at least four languages: Tamazight, Arabic, French, English.

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And in three different writing systems: Tifinagh, Arabic, Latin letters.

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#### Ahmed Zeriahi: researcher

Accordingt to *MathSciNet*, Ahmed is the author of 65 publications during the forty years 1981–2020.

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Even more remarkable is the list of his co-authors.

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#### Many coauthors

These coauthors are, with the earliest first:

Nguyen Thanh Van, Pierre Bonneau, Anne Cumenge, Omar Alehyane, Urban Cegrell, Slimane Benelkourchi, Sławomir Kołodziej, Vincent Guedj, Dan Coman, Philippe Eyssidieux, Per Åhag, Hoang Hiep Pham, Sébastien Boucksom, Azimbay Sadullaev, Robert J. Berman, Jean-Pierre Demailly, Sławomir Dinew, Sibel Şahin, Chinh H. Lu, Fatima Zahra Assila, Said Asserda, Amel Benali, Mohamad Charabati, Henri Guenancia.

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Many of these coauthors are actually invited speakers at the present conference.

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#### **Important prizes**

In 2016, Ahmed received a prize from the European Mathematical Society for a book written with Vincent Guedj: *Degenerate Monge–Ampère Equations*.

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This prize, created in 1886, is awarded by the French Academy of Sciences to mathematicians every third year.

#### A remarkable career

Ahmed got his Doctorate *Troisième cycle* in 1980 with Nguyen Thanh Van (1943–2015) as advisor, and his *Doctorat d'État* in 1986.

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Then, from 1989 up to 2020, Professor at Université Paul Sabatier, starting as *Professeur Associé* and ending as *Professeur Classe Exceptionelle*,  $2^{\text{ème}}$  échelon in 2020.

#### Ahmed in Sweden four times: 1984, 1990, 2008, 2015

In our correspondence, the oldest letter I have is from 1983: an invitation to Ahmed to come to Sweden in April 1984.

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Ahmed and Martine were in Stockholm at a later occasion: a semester at Institut Mittag-Leffler, Spring Semester of 2008.

We organize annually at Stockholm University a conference dedicated to the memory of Mikael Passare (1959–2011).

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On 2015 September 16, Ahmed Zeriahi and Lawrence Gruman were invited.

Ahmed's talk had the title *Weak solutions to degenerate Monge–Ampère flows.* 

Larry's was Value distribution for holomorphic mappings and Nevanlinna theory in several dimensions.

#### Ahmed docteur 1986

Ahmed presented his *Thèse d'État* on 1986 January 23. I was *rapporteur*.

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I quote, in translation, the beginning of my report:

"The thesis is in the field of the theory of functions of several complex variables, more precisely, it presents remarkable contributions to research on extremal plurisubharmonic functions; the theory of capacities adapted to the complex structure; and approximation theory. It consists of three parts, certainly interrelated, but which I will now comment on separately."

## There are several pages dedicated to these three parts, and then a conclusion:

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"The work by Ahmed Zeriahi is placed in a research area which of value and is demanding, and is of high and current interest. The methods used give evidence of a remarkable understanding of extremal plurisubharmonic functions; in addition, the proofs are easy to follow. In my opinion, this dissertation is a *Thèse d'État* of very high quality."

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## Ahmed Faculty Opponent for Xiaoqin Wang 1990 Xiaoqin came from Xiamen in Fujian Province on 1986 January 01.

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She defended her Doctoral Thesis on 1990 May 05: Singular Integrals and Analyticity Theorems in Several Complex Variables.

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Xiaoqin is now Senior Lecturer and Docent at the University of Gävle.

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I was the referee also for this paper.

#### **Christer in Toulouse**

This is my twentyfirst visit.

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- 1. 1976, March April: Visiting Professor, Paris VI;
- 2. 1982 March: Visiting Professor, Bordeaux;
- 3. 1982 December: Bordeaux, Montesquiou;
- 4. 1983 May: Colloque d'Analyse complexe;
- 5. 1985: Journées complexes du Sud in Couiza;
- 6. 1986 January: *Soutenance de la thèse d'Ahmed, rapporteur*;
- 7. 1987 January, Visiting Professor, Toulouse, *Journées complexes du Sud*.

- 8. 1990 September: Visiting Professor, Toulouse;
- 9. 1991 March: Visiting Professor, Grenoble;
- 10. 1992 June;
- 11. 1997 September;
- 12. 1998 August.

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And nine during this century:

- 13. 2002 May: Docteur Honoris Causa;
- 14. 2006 December,
- 2008 October: Conference in honor of Nguyen Thanh Van. Van's advisor had been Michel Hervé (1921–2011). Jean-Paul Calvi is his PhD student.

Text published in *Annales de la Faculté des Sciences de Toulouse*, 2011.

Van published 34 articles during the period 1965–2008.

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- 16. 2010 July;
- 17. 2015 July;
- 18. 2016 April;
- **19**. 2017 May;
- 20. 2019 March; and

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- 18. 2016 April;
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- 20. 2019 March; and
- 21. 2021: Right now!

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#### Conclusion

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Maybe Ahmed himself, and others can tell us more ...

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## Merci beaucoup !

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**Merci beaucoup**! **Thank you!** Thanks directed to Ahmed Zeriahi, Martine Klughertz, Henri Guenancia, Vincent Guedj, and to all other organizers