Conférences et posters depuis l'arrivée à Fribourg Jean–Paul Berrut

Barycentric formulae for cardinal (SINC–) interpolants:

Kolloquium über numerische Mathematik, ETHZ, 1er décembre 1988.

Formules barycentriques pour interpolants cardinaux (SINC):

Département de mathématiques, EPFL, 24 février 1989.

Barycentric formulae for some optimal rational approximants involving Blaschke products:

aux congrès de Dundee, Scottland, 30 juin 1989, et de San Diego, California, 20 juillet 1989.

A pseudospectral Čebyšev method with preliminary transform to the circle: ordinary differential equations:

au congrès sur le calcul scientifique, Wien, Oesterreich, 16 juin 1990.

Quelques applications simples de la fonction SINC en analyse numérique:

à la Journée des Anciens du Centenaire de l'Université, Fribourg, 20 avril 1990.

A pseudospectral Čebyšev method with preliminary transform to the circle: partial differential equations:

au Colloquium on Applications of Mathematics on the occasion of the 80th birthday of Lothar Collatz, Hambourg, 6 juillet 1990.

Die pseudospektrale Čebyšev Methode mit Vortransformation auf den Kreis:

Technische Universitaet Muenchen, 11 juillet 1990.

A pseudospectral Čebyšev method with preliminary transform to the circle: the PDE case:

5th Conference on Numerical Methods, Miskolč, Hongrie, 22 août 1990.

Barycentric formulae for some optimal rational approximants involving Blaschke products:

University of North Carolina, Chapel Hill, 7 mars 1991.

The pseudospectral Čebyšev method with preliminary transform to the circle:

Naval Postgraduate School, Monterey, California, 14 mars 1991; Simon Fraser University, Burnaby, British Columbia, Canada, 21 mars 1991; Arizona State University, Tempe(Phoenix), 9 avril 1991 et University of California at San Diego, La Jolla, California, 11 avril 1991.

For ODEs, the condition (stability) of the spectral Čebyšev methods is not a problem:
14th Biennial Conference on Numerical Analysis, Dundee, Ecosse, 27 juin 1991.

Formeln für optimale Evaluation und Integration in H^2:
Universität Göttingen, 21 janvier 1992, et Universität Mainz, 23 janvier 1992.

A closed formula for the Čebyšev barycentric weights of optimal approximation in H^2:
poster, journée suisse d'analyse numérique, EPFZ, 16 avril 1992.

Stable preconditioning for the Čebyšev pseudospectral method:
poster, "International Conference on Spectral and High Order Methods (ICOSA-HOM92)", Montpellier, 24 juin 1992.

A formula for optimal integration in H^2*:*
"First International Colloquium on Numerical Analysis", Plovdiv (Bulgarie), 16 août 1992.

Evaluation optimale de fonctionnelles dans H^2*:*
Colloque de l'Institut de Mathématiques de l'Université de Neuchâtel, 2 février 1993.

Lebesgue constant minimizing linear rational interpolation of continuous functions over the interval:
15th Dundee Biennial Conference on Numerical Analysis, 29 juin 1993; Conference for the 50th Anniversary of "Mathematics of Computation", University of British Columbia, Vancouver, Canada, 11 août 1993; Conference on Nonlinear Numerical Methods and Rational Approximation, Anvers, 7 septembre 1993; Southeastern SIAM Meeting, Wake Forest University, Winston Salem, North Carolina, 25 mars 1994; Texas A+M, College Station, Texas, 31 mars 1994; Texas Tech University, Lubbock, Texas, 7 avril 1994; Wichita State University, Wichita, Kansas, 12 avril 1994; Arizona State University, Tempe (Phoenix), Arizona, 14 avril 1994; Naval Postgraduate School, Monterey, California, 5 mai 1994; University of California at San Diego, La Jolla, California, 12 mai 1994.

Fascinante interpolation:
Société Fribourgeoise des Sciences Naturelles, Fribourg, 17 mars 1994 (leçon inaugurale).

A closed formula for the Čebyšev barycentric weights of optimal approximation in H^2*:*

"NATO Advanced Workshop on Algorithms for Approximation", Oxford, 28 juillet 1992, et "Jahrestagung der Gesellschaft für Angewandte Mathematik und Mechanik", Dresden, 14 avril 1993.

Optimal Evaluation of Linear Functionals in H^2*:*

University of California at San Diego, La Jolla, California, 3 mai 1994; University of Utah, Salt Lake City, Utah, 19 mai 1994.

Optimal linear rational interpolation of continuous functions over the interval:

International Congress of Mathematicians, Zürich, 9 août 1994.

A preconditioning method for the Čebyšev pseudospectral method:

Southeastern SIAM Meeting, Charleston, Caroline du Sud, 25 mars 1995; International Conference on Scientific Computation and Differential Equations 95 (SciCADE95), Stanford, 29 mars 1995.

A matrix and a formula for the barycentric weights of rational interpolation:

16th Biennial Conference on Numerical Analysis, Dundee, Ecosse, 29 juin 1995.

A matrix for the barycentric weights of rational interpolation:

Jahrestagung der Deutschen Mathematiker–Vereinigung, Ulm, 19 septembre 1995.

Exponentially convergent linear rational interpolation between equidistant (and other) points?:

Conference on Numerical Mathematics celebrating the 60th birthday of M.J.D. Powell, Cambridge UK, 28 juillet 1996.

Interpolation rationnelle sous forme barycentrique:

Conférence principale à la Journée suisse d'analyse numérique, Genève, 5 mars 1997.

The barycentric weights of rational interpolation with prescribed poles:

International Colloquium on Applications of Mathematics in memoriam Lothar Collatz, Hamburg, 4 juillet 1997; Annual SIAM Meeting, Stanford, 15 juillet 1997.

The errors in calculating the pseudospectral differentiation matrices for Čebyšev–Gauss–Lobatto points:

International Conference on Scientific Computation and Differential Equations 97 (SciCADE97), Grado, Italie, 16 septembre 1997; Fourth International Conference on Spectral and High Order Methods, ICOSAHOM 98 (avec R. Baltensperger), Tel Aviv, Israël, 22 juin 1998.

Numerical solution of a boundary integral equation for conformal mapping by means of attenuation factors:

International Conference on Computational Methods and Function Theory (CMFT '97), Nicosie, Chypre, 16 octobre 1997.

Rational interpolation in barycentric form:

Arizona State University, Tempe (Phoenix), Arizona, 16 février 1998; University of California at San Diego, La Jolla, California, 17 février 1998; Colloque, Université de Fribourg, 16 juin 1998.

The error in calculating the pseudospectral differentiation matrices for Chebyshev–Gauss–Lobatto points:

International Conference on Spectral and High–Order Methods ICOSAHOM98, Herzliya, Israël, 22 juin 1998, donnée par Richard Baltensperger.

Rational interpolation through the optimal attachment of poles to the interpolating polynomial:

International Congress on Computational and Applied Mathematics ICCAM 98, Leuven, Belgique, 31 juillet 1998.

Un interpolant rationnel linéaire à convergence exponentielle et son application à la résolution numérique d'EDPs:

Session d'automne de la Société Mathématique Suisse, Airolo, 23 septembre 1998, donné par Richard Baltensperger.

The linear rational collocation method for the numerical solution of the 2D wave equation:

Arizona State University, Tempe (Phoenix), Arizona, 18 février 1999; University of California at San Diego, La Jolla, California, 2 mars 1999.

The linear rational collocation method for PDEs:

Midwest Numerical Analysis Day, Illinois Institute of Technology, Chicago, 24 avril 1999.

Rational interpolation in barycentric form:

University of Iowa, Iowa City, 22 avril 1999; Purdue University, West Lafayette Indiana, 27 avril 1999; University of Wisconsin, Madison, 3 mai 1999.

A matrix for determining lower complexity barycentric representations of rational interpolants:

International Conference on Rational Approximation, Université d'Anvers, Belgique, 7 juin 1999; 18th Biennial Conference on Numerical Analysis, Dundee, Ecosse, 1er juillet 1999.

The linear rational collocation method for PDEs:

International Conference on Scientific Computation and Differential Equations SCICADE99, Fraser Island, Queensland, Australie, 12 août 1999.

The errors in calculating pseudospectral differentiation matrices:

Journée Suisse d'Analyse Numérique, Ecoles d'Ingénieurs de Fribourg, 12 octobre 1999.

Rationale Interpolation in baryzentrischer Form und Anwendungen:

Colloque de la Faculté de Mathématiques de la Technische Universität München, Munich, 7 décembre 1999.

The linear rational collocation method for boundary value problems:

BIT 40th anniversary meeting, Lund, Suède, 9 août 2000.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

16th IMACS World Congress, 22 août 2000.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

International Colloquium on the Application of Mathematics Collatz 2000, 29 septembre 2000.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

Simon Fraser University, Vancouver, Canada, 13 octobre 2000.

A matrix for determining lower complexity barycentric representations of rational interpolants:

7th SIAM Conference on Applied Linear Algebra, Raleigh, North Carolina, USA, 25 octobre 2000.

Rationale Interpolation in baryzentrischer Form und Anwendungen:

Oberseminar für angewandte Mathematik, Université de Zurich, 23 novembre 2000.

Une application de la méthode de collocation linéaire rationnelle:

Petit séminaire, Université de Fribourg, 13 décembre 2000.

The linear rational pseudospectral method with iteratively optimized poles for two-point boundary value problems:

GAMM 2001, ETH Zürich, 12 février 2001.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

19th Biennial Conference on Numerical Analysis, Dundee, Ecosse, 28 juin 2001.

Point shifts in rational interpolation with optimized denominator:

Algorithms for Approximation IV, Huddersfield, GB, 18 juillet 2001.

The linear rational collocation method for boundary value problems:

Numerical Analysis 2001, Marrakech, Maroc, 2 octobre 2001.

Iterative solution of the systems arising from the linear rational pseudospectral method for boundary value problems:

Latsis 2002 – Iterative Solvers for Large Linear Systems, ETH Zürich, 19 février 2002.

Iterative solution of the systems arising from the linear rational pseudospectral method for boundary value problems:

7th Conference on Iterative Methods, Copper Mountain, Colorado, 29 mars 2002.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

University of Utah, Salt Lake City, 10 avril 2002.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

University of California at San Diego, La Jolla, 16 avril 2002.

The linear rational collocation method for boundary value problems:

Arizona State University, Tempe, 18 avril 2002.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

Université de Modène, Italie, 8 mai 2002.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

Université d'Algarve, Portugal, 23 mai 2002.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

Kolloquium über Angewandte und Numerische Mathematik, ETH Zürich, 19 juin 2002.

The linear rational collocation method with iteratively optimized poles for two-point boundary value problems:

Conference on Scientific Computation, Université de Genève, 27 juin 2002.

Adaptive point shifts in rational interpolants with optimized denominator:

International Congress on Computational and Applied Mathematics ICCAM2002, Katholieke Universiteit Leuven, Belgique, 24 juillet 2002.

Improving spectal methods with optimized rational interpolation:

Computing Laboratory, Université d'Oxford, 20 février 2003.

Improving spectal methods with optimized rational interpolation:

20th Biennial Conference on Numerical Analysis, Dundee, Ecosse, 26 juin 2003.

Adaptive point shifts in the linear rational pseudospectral method:

Conférence invitée dans le cadre du minisymposium "Practical Spectral Methods for Differential Equations" au 5th International Congress on Industrial and Applied Mathematics ICIAM 2003, Sydney, Australie, 11 juillet 2003.

Adaptive point shifts in rational interpolants with optimized denominator:

Conférence principale au 4^{th} Bommerholz International Meeting on Constructive Approximation IBoMAT 2004, Universitätskolleg Bommerholz, Witten, Allemagne, 16 février 2004.

Un autre regard sur la formule d'Euler–Maclaurin:

Université de Fribourg, 2 avril 2004.

Another look at the Euler–Maclaurin formula:

International Congress on Computational and Applied Mathematics ICCAM 2004, Katholieke Universiteit Leuven, Belgique, 27 juillet 2004.

Another look at the Euler–Maclaurin formula:

International Congress on Numerical Analysis and Applied Mathematics ICNAAM 2004, Technological Educational Institute, Psahna, Chalkis, Grèce, 11 septembre 2004.

Fourier and barycentric formulae for equidistant Hermite trigonometric interpolation:

21st Biennial Conference on Numerical Analysis, Dundee, Ecosse, 30 juin 2005.

Fourier and barycentric formulae for Hermite trigonometric interpolation between equidistant points:

17th IMACS World Congress (Scientific Computation, Applied Mathematics and Simulation), Paris, 13 juillet 2005.

Fourier and barycentric formulae for equidistant Hermite trigonometric interpolation:

A4A5 Algorithms for Approximation V, Chester, Angleterre, 19 juillet 2005.

Adaptive point shifts in the linear rational pseudospectral method:

Adaptivity and Beyond: Computational Methods for Solving Differential Equations, Vancouver, Canada, 3 août 2005.

Déplacements de points adaptifs dans la méthode pseudospectrale rationnelle linéaire:

Laboratoire d'Ingénierie Numérique, Ecole Polytechnique Fédérale de Lausanne, 19 janvier 2006.

A formula for the error of finite sinc–interpolation over a fixed finite interval:

Congrès Curves and Surfaces, Avignon, France, 4 juillet 2006; International Congress on Computational and Applied Mathematics ICCAM 2006, Katholieke Universiteit Leuven, Belgique, 27 juillet 2006; First Dolomites Conference on Constructive Approximation and Applications, Alba di Canazei, Italie, 8 septembre 2006; International Congress on Numerical Analysis and Applied Mathematics ICNAAM 2006, Chersonissos, Crète, 15 septembre 2006.

A formula for the error of finite sinc–interpolation with an even number of nodes:

12^{th} International Conference in Approximation Theory, San Antonio, Texas, 4 mars 2007.

A formula for the error of finite sinc–interpolation over a fixed finite interval:

Arizona State University, Tempe (Phoenix), Arizona, 23 mars 2007; University of California at San Diego, La Jolla, 10 avril 2007.

A formula for the error of finite sinc–interpolation with an even number of nodes:
Conference on Optimal Algorithms and Computational Complexity for Numerical Problems, Salt Lake City, 7 mai 2007.

Euler aurait découvert cette formule pour l'erreur de l'interpolation sinc finie si ...:
Colloque, Université de Fribourg, 5 juin 2007.

A formula for the error of finite sinc–interpolation with an even number of nodes:
22nd Biennial Conference on Numerical Analysis, Dundee, Ecosse, 28 juin 2007.

First applications of a formula for the error of finite sinc–interpolation:
6th International Congress on Industrial and Applied Mathematics ICIAM 07, Zurich, 20 juillet 2007; Congrès "Curves and Surfaces", Toensberg, Norvège, 30 juin 2008; Conference on Approximation Theory, dedicated to the 70th birthday of József Szabados, Budapest, 8 juillet 2008; Conference in Numerical Analysis NumAn2008, honoring Richard S. Varga on his 80th birthday, Kalamata, Grèce, 1er septembre 2008.

Fighting Gibbs' phenomenon through quotienting:
23d Biennial Conference on Numerical Analysis, University of StrathClyde, Glasgow, 25 juin 2009; 2nd Dolomites Workshop on Constructive Approximation and Applications, Alba di Canazei (Trento), Italie, 9 septembre 2009; University of Oslo, Centre of Mathematics for Applications, Oslo, Norvège, 23 novembre 2009; Joint Mathematics Meetings, San Francisco, 15 janvier 2010.

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