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Articles in conferences

2017 (36)

Pamela Franco, Bram Ruijsink, David Nordsletten, Eric Kerfoot, **Julio Sotelo**, **Joaquín Mura**, **Daniel Hurtado**, **Sergio Uribe**. “Caracterización del flojo 4D obtenido por Resonancia Magnética mediante el uso de elementos finitos: aplicado a pacientes con miocardiopatía dilatada”. LIV Congreso Chileno de Cardiología y Cirugía Vascul, 2017 Santiago, Chile. Dic.1 <http://www.sochicar.cl/index.php>

Cristóbal Arrieta, Pablo Besa, Ignacio Osorio, **Cristian Montalba**, Daniel Hasson, Daniela Esparza, **Marcelo Andía**, Julio Urrutia, **Sergio Uribe**. “Validation of T2 weighted images for assessing fat infiltration in Paraspinal muscles using an Osirix application” 103rd Scientific Assembly and Annual Meeting of the Radiological Society of North America, Nov. 26 – Dic. 1 Chicago, Illinois.

Sergio Uribe. “Images of flow and cardio vascular” [Jornadas de tecnología médica de la Clínica Alemana](#), Santiago-Chile. Nov.3rd, 2017.

Julio Sotelo “Characterization of flow in cardiovascular images” [Jornadas de tecnología médica de la Clínica Alemana](#), Santiago-Chile. Nov.3rd, 2017.

Marcelo Andía. “Molecular magnetic resonance”. [Jornadas de tecnología médica de la Clínica Alemana](#), Santiago-Chile. Nov.3rd, 2017.

Cristián Montalba. “Evaluation of short fibers in patients with multiple sclerosis”. [Jornadas de tecnología médica de la Clínica Alemana](#), Santiago-Chile. Nov.3rd, 2017.

Sergio Uribe. “Modelos tridimensionales en la evaluación de anatomías complejas de doble salida de ventrículo derecho”. [Jornadas de tecnología médica de la Clínica Alemana](#), Santiago-Chile. Nov.3rd, 2017.



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Carlos Castillo, Gabriel Varela-Mattatall & Pablo Irarrazaval. Students presentation: “GIRL1: Gini Reweighted ℓ_1 Minimization for Rapid MRI”. X Congreso Anual de Ingeniería Biomédica, Concepción, Chile, 23 -26 oct.

<https://www.eventrid.cl/eventos/cicbconcepcion/x-congreso-anual-de-ingenieria-biomedica-caib-2017>

Gabriel Varela-Mattatall, Carlos Castillo & Pablo Irarrazaval Students presentation: “Mean apparent propagator using compressed sensing” X Congreso Anual de Ingeniería Biomédica, Concepción, Chile, 23 -26 oct.

<https://www.eventrid.cl/eventos/cicbconcepcion/x-congreso-anual-de-ingenieria-biomedica-caib-2017>

Julio Sotelo, Lydia Dux-Santoy, Andrea Guala, José Rodríguez-Palomares, Arturo Evangelista, Joaquín Mura, Daniel Hurtado, Sergio Uribe. “Descomposición tridimensional de la tensión de corte en pacientes con válvula bicúspide usando datos de flujo 4D obtenidos por resonancia magnética y un enfoque laplaciano basado en elementos finitos”. XVI Jornada de Mecánica Computacional La Serena, 5-6 octubre.

<http://www.scmc.cl/index.php/joomlaspanishorg/78-noticias/88-jmc2017>

Pamela Franco, Julio Sotelo, Bram Ruijsink, David Nordsletten, Eric Kerfoot, Joaquín Mura, Daniel Hurtado y Sergio Uribe. “Caracterización del flujo 4D obtenido por resonancia magnética en pacientes con miocardiopatía dilatada y el uso de elementos finitos”. XVI Jornada de Mecánica Computacional La Serena, 5-6 oct.

<http://www.scmc.cl/index.php/joomlaspanishorg/78-noticias/88-jmc2017>

Hernán Mella, Joaquín Mura, Julio Sotelo, Cristian Montalba y Sergio Uribe. “Estimación de deformaciones en el ventrículo izquierdo usando imágenes de flujo”. XVI Jornada de Mecánica Computacional La Serena, 5-6 octubre.

<http://www.scmc.cl/index.php/joomlaspanishorg/78-noticias/88-jmc2017>

Joaquín Mura, Julio Sotelo, Hernán Mella, Pamela Franco, Sergio Uribe. “Estimación semi-automática de velocidad de onda en arterias mediante 4DFlow MRI”. XVI Jornada de Mecánica Computacional La Serena, 5-6 oct.



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<http://www.scmc.cl/index.php/joomlaspanishorg/78-noticias/88-jmc2017>

Julio Sotelo, Lydia Dux-Santoy, Andrea Guala, José Rodríguez-Palomares, Arturo Evangelista, **Joaquín Mura**, Daniel Hurtado, **Sergio Uribe**. “Análisis de parámetros hemodinámicos en pacientes con válvula aórtica bicúspide mediante el uso de elementos finitos y datos de flujo 4D obtenidos por resonancia magnética”. XVI Jornada de Mecánica Computacional La Serena, 5-6 oct. <http://www.scmc.cl/index.php/joomlaspanishorg/78-noticias/88-jmc2017>

C. Milovic, B. Bilgic, B. Zhao, J. Acosta-Cabronero, **C. Tejos**. “Fast Nonlinear Susceptibility Inversion (FANSI Toolbox for QSM)”. 34th Annual Scientific Meeting ESMRMB, Barcelona, Octubre 2017. <https://www.efomp.org/index.php/conferences/452-34th-annual-scientific-meeting-of-the-european-society-for-magnetic-resonance-in-medicine-and-biology>

C. Milovic, B. Bilgic, C. Langkammer, J. Acosta-Cabronero, **C. Tejos**. “Quantitative Susceptibility Mapping (QSM) challenge follow-up: analysis of susceptibility ground-truth and quality metrics”. 34th Annual Scientific Meeting ESMRMB, Barcelona, Octubre 2017. <https://www.efomp.org/index.php/conferences/452-34th-annual-scientific-meeting-of-the-european-society-for-magnetic-resonance-in-medicine-and-biology>

C. Milovic, B. Bilgic, B. Zhao, J. Acosta-Cabronero, **C. Tejos**. “Spatially weighted regularization with Magnitude prior knowledge for QSM”. 34th Annual Scientific Meeting ESMRMB Barcelona, Octubre 2017. <https://www.efomp.org/index.php/conferences/452-34th-annual-scientific-meeting-of-the-european-society-for-magnetic-resonance-in-medicine-and-biology>

A. Xavier, F. Zacconi, K. Fuenzalida, S. Zanlungo, **M. Andia**; Abstract 870. “Liver Cholesterol is a biomarker of Niemann-pick diseases progression and liver damage and could be quantified with MRS”. Session Type: Scientific Session Topic: Preclinical Studies and Basic Science / MR spectroscopy applications (preclinical and basic science focus). 34th Annual Scientific Meeting ESMRMB, Barcelona, Octubre 2017.



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A. Xavier, F. Zacconi, K. Fuenzalida, **S. Uribe**, **M. Andia**. Abstract 869 “Fatty acids profile during Non Alcoholic Fat Liver Disease progression using Magnetic Resonance Spectroscopy”. Session Type: Scientific Session Topic: Preclinical Studies and Basic Science / MR spectroscopy applications (preclinical and basic science focus) 34th Annual Scientific Meeting ESMRMB, Barcelona, Octubre 2017.

<https://www.efomp.org/index.php/conferences/452-34th-annual-scientific-meeting-of-the-european-society-for-magnetic-resonance-in-medicine-and-biology>

C. Juri, L. Tapia, J.P. Cruz, **S. Uribe**, **M. Andia**; Abstract 408 “T1mapping for the assessment of the substantia nigra in Parkinson disease”. Session Type: Scientific Session Topic: Clinical Applications / Brain (excluding functional and MRS) 34th Annual Scientific Meeting ESMRMB, Barcelona, Octubre 2017.

<https://www.efomp.org/index.php/conferences/452-34th-annual-scientific-meeting-of-the-european-society-for-magnetic-resonance-in-medicine-and-biology>

Pamela Franco, **Julio Sotelo**, Bram Ruijsink, David Nordsletten, Eric Kerfoot, **Joaquín Mura**, **Daniel Hurtado**, **Sergio Uribe**. “Caracterización del flujo 4D obtenido por Resonancia Magnética mediante el uso de elementos finitos: aplicado a pacientes con miocardiopatía dilatada” II Congreso de Estudiantes de Ingeniería USM – UC, 2017, Santiago, Chile, Sep 1, <http://www.noticias.usm.cl/2017/09/11/positivo-balance-tras-ii-congreso-de-estudiantes-de-ingenieria-de-la-usm-y-la-puc/>

Pamela Franco, **Julio Sotelo**, Bram Ruijsink, David Nordsletten, Eric Kerfoot, **Joaquín Mura**, **Daniel Hurtado**, **Sergio Uribe**. “Comprehensive 3D flow characterization in patients with Dilated Cardiomyopathy (DCM) from 4D flow MRI data using a finite element method and 17-Segment Bullseyes”. ISMRM Workshop on Magnetic Resonance Imaging of Cardiac Function, NYC, USA, Agosto 2017.

<http://www.ismrm.org/workshops/Cardiac17/>



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Sergio Uribe. “Modelos tridimensionales en la evaluación de anatomías complejas de doble salida de ventrículo derecho”. Curso Anual de Ecocardiografía e Imágenes Cardíacas Santiago, Chile. 2017 <http://www.sochicar.cl/index.php/agenda-2016.html>

Hernán Mella, Joaquín Mura, Julio Sotelo, Cristian Montalba, Sergio Uribe. “Left Ventricle Strain Estimation using flow data”. Poster 200 Cardiovascular 8:15 10:15, Abril 27, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Felipe Cortes, Carlos Sing-Long, Sergio Uribe. “A novel compressed sensin inspired approach for flow reconstruction”. Poster 900 Acquisition, Reconstruction & Analysis 8:15 10:15 Abril 24, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Carlos Milovic, Berkin Bilgic, Bo Zhao, Julio Acosta-Cabronero, Cristian Tejos. “A Fast Algorithm for Nonlinear QSM Reconstruction”. E-Poster 800 Contrast Mechanisms 16:15 17:15 Abril 24, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Cristian Montalba, Julio Sotelo, Jesús Urbina, Marcelo Andía, Cristián Tejos, Pablo Irrarrazaval, Israel Valverde, Sergio Uribe. “Analysis of WSS variability subjected to changes of 4D flow parameters using a realistic aortic phantom”. Poster 200 Cardiovascular 8:15 10:15 Abril 27, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Joaquin Mura, Julio Sotelo, Cristian Montalba, Bram Ruijsink, David Nordsletten, Reza Razavi, Pablo Irrarrazaval, Cristian Tejos, Marcelo Andía, Sergio Uribe. “An automatic method to estimate 3D Pulse Wave Velocity from 4D-Flow MRI data”. Poster 200 Cardiovascular 8:15 10:15 Abril 27, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Carlos Sing-Long, Cristobal Arrieta, Curtis N Wiens, Diego Hernando, Sergio Uribe. “Water and fat separation using a Gauss-Newton Trust-Region based algorithm” E-



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Poster 900 Acquisition, Reconstruction & Analysis 17:15 18:15 Abril 26, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Julio Sotelo, Lydia Dux-Santoy , Andrea Guala , Jose Rodríguez-Palomares , Arturo Evangelista , Daniel Hurtado, **Sergio Uribe**. “Analysis of 4D Flow hemodynamics parameters in BAV patients using a finite element method”. Electronic Power Pitch Poster 200 Cardiovascular 10:15 11:15 Abril 25, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Julio Sotelo, Jesús Urbina, Bram Ruijsink, David Nordsletten, **Joaquín Mura**, Reza Razavi, Daniel Hurtado, **Sergio Uribe**. “Tridimensional Axial and Circumferential WSS from 4D Flow data using a finite element method and a Laplacian approach” Oral 200 Cardiovascular 15:30 17:30 Abril 27, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Lydia Dux-Santoy , Andrea Guala , Jose Rodríguez-Palomares , **Julio Sotelo**, Daniel Hurtado, **Sergio Uribe**, Arturo Evangelista. “Distribution of 4D Flow MRI-derived wall shear stress and oscillatory shear index and its relation with the ascending aorta dilation in bicuspid valve patients”. E-poster 200 Cardiovascular 15:30 17:30 Abril 27, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Patricia Vargas, Ranganatha Sitaram, Pradyumna Sepúlveda, **Cristian Montalba**, Mohit Rana, **Cristián Tejos**, Sergio Ruiz. “Real-time fMRI functional connectivity self-regulation and motor performance” Traditional Poster 1100 fMRI 8:15 10:15 Abril 25, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>

Gabriel Varela-Mattatall, Alexandra Tobisch, Rüdiger Stirnberg, Steren Chabert, Tony Stöcker, **Cristián Tejos**, **Pablo Irrazaval**. “Negentropy: non-Gaussian characterization for Diffusion Spectrum Imaging” 7412 E-Poster 1000 Diffusion 13:45 14:45 Abril 24, 2017. ISMRM annual meeting, Abril 22-27th, Honolulu, USA. <http://www.ismrm.org/17/17program.htm>



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Lavin-Plaza B, **Andia ME**, Eykyn T, Phinikaridou A, **Botnar RM**. “Accelerated liver steatosis in eNOS^{-/-} mice fed with high fat diet is reduced by aortic vascular injury”. *Proceedings 12th European Molecular Imaging Meeting*, Cologne, Alemania, 5-7 Abril 2017. <http://www.e-smi.eu/index.php?id=1976>.

Cristián Tejos. “Nuevas Plataformas en Neuroimágenes” Simposio Multidisciplinario: Enfrentando a la Esclerosis Múltiple en el día a día, 31 mar-1 abr 2017, Santiago, Chile. <http://www.educacioncontinua.uc.cl/25054-ficha-simposio-multidisciplinario-enfrentando-a-la-esclerosis-multiple-en-el-dia-a-dia>

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Irarrázaval P. “Técnicas de Aceleración en Resonancia Magnética Conceptos Técnicos”. Congreso Chileno de Radiología. Santiago, Chile. Oct 2016.

Andía M. “Nuevos Métodos de aceleración en RM: Aplicaciones Clínicas”. Congreso Chileno de Radiología. Santiago, Chile. Oct 2016.

Milovic C, **Tejos C**. “Impact of dipole Kernel discretization on QSM”. 4th International Workshop on MRI Contrast & Quantitative Susceptibility Mapping. Graz, Austria. Sep 2016.

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Sepúlveda P, Sitaram R, Rana M, Montalba C, **Tejos C**, Ruiz S. “Influence of feedback, motor imagery and reward in brain self-regulation using real-time fMRI”. 22nd Annual Meeting of the Organization for Human Brain Mapping. Geneva, Suiza. Jun 2016.

Pereira J, Sitaram R, Sepúlveda P, Rana M, Montalba C, **Tejos C**, Ruiz S. “Volitional control of Fusiform Face Area in Autism Spectrum Disorder with Brain Computer Interfaces”. 22nd Annual Meeting of the Organization for Human Brain Mapping. Geneva, Suiza. Jun 2016.



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Milovic C, Pinto JM, Acosta-Cabronero J, **Irarrázaval P**, **Tejos C**. “Parameter selection in total generalized variation based reconstruction problems” Proceedings 24th International Conference of the ISMRM, Singapur, May. 2016.

Phinikaridou A, Lacerda S, **Andía ME**, **Botnar RM**. “Assessment of atherosclerotic burden using a novel tropoelastin-specific MR contrast agent”. Proceedings 24th International Conference of the ISMRM, Singapur, May. 2016.

Urbina J, Sotelo J, Montalba C, **Andía M**, Valverde I, **Irarrázaval P**, **Uribe S**, **Tejos C**. “Variability of flow parameters when subjected to changes of MR acquisitions parameters in 4D flow MRI using a realistic thoracic aortic phantom” Proceedings 24th International Conference of the ISMRM, Singapur, May. 2016 (Poster Tradicional).

Urbina J, Sotelo J, Montalba C, Fernández T, Valenzuela F, **Andía M**, Valverde I, **Irarrázaval P**, **Uribe S**, **Tejos C**. “A realistic Aortic phantom with a kinking of the aorta: one to one replica of a patient and comparison using PC-MRI and cardiac catheterization” Proceedings 24th International Conference of the ISMRM, Singapur, May. 2016 (Poster Tradicional).

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Sepúlveda P, Sitaram R, Montalba C, Rana M, **Tejos C**, Ruíz S. “How feedback, verbal instruction and reward influence learning brain self-regulation? A real-time fMRI study” Proceedings 24th International Conference of the ISMRM, Singapur, May. 2016 (Poster Electrónico).



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Sotelo J, Urbina J, Montalba C, Valenzuela F, Valverde I, **Tejos C, Irarrázaval P, Andía M, Uribe S**. “Accuracy of relative pressure measurements from 3D PC-MR data using realistic aortic coarctation phantoms”. Proceedings 24th International Conference of the ISMRM, Singapur, May. 2016 (Poster Electrónico).

Sotelo J, Urbina J, Ruijsink B, Nordsletten D, Valverde I, **Tejos C, Irarrázaval P, Andía M, Hurtado D, Uribe S**. “3D Quantification of vorticity, helicity, kinetic energy and energy loss in the left ventricle from 4D flow data using a finite element method”. Proceedings 24th International Conference of the ISMRM, Singapur, May. 2016 (Poster Tradicional).

Phinikaridou A, Saha P, **Andía ME**, Smith A, **Botnar RM**. “Multi-sequence non-contrast MRI characterization of deep vein thrombosis in man”. Proceedings 24th International Conference of the ISMRM, Singapur, May. 2016 (Presentación Oral).

Saha P, Phinikaridou A, **Andía ME**, Modarai B, Black S, Patel AS, **Botnar RM**, Smith A. “The Utility of Noncontrast Multisequence Magnetic Resonance Imaging to Identify Venous Thrombi Suitable for Lysis”. Proceedings 28th Annual Meeting, American Venous Forum, J Vasc Surg Venous Lymphat Disord 2016;4(1):147.

J Sotelo, **S Uribe**, D Hurtado. “Tridimensional Quantification of Cardiovascular Hemodynamics Parameter Using Finite Element Methods from 4D Flow MRI Data”. Fifth



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J. Sotelo, J. Urbina, I. Valverde, **C. Tejos, P. Irarrázaval**, D. E. Hurtado, **S. Uribe**. “3D Quantification of hemodynamics parameters of pulmonary artery and aorta using finiteelement interpolations in 4D flow MR data”. 18th Annual SCMR Scientific Sessions, Niza, Francia, Feb 5-7 2015.

Aguirre-Reyes D, Arab JP, Arrese M, Tejos R, **Irarrázaval P, Tejos C, Uribe S, Andía ME**. “Non-invasive portal hypertension diagnosis using non-contrast MR portal-venogram”. Proceedings ISMRM Workshop on Non-Contrast Cardiovascular MRI, Long Beach, CA, 2015 (Presentación Oral).

J. Sotelo, J. Urbina, I. Valverde, **C. Tejos, P. Irarrázaval, M. Andía, S. Uribe**, D. Hurtado. “Cuantificación tridimensional de parámetros cardiovasculares usando elementos finitos e imágenes de flujo obtenidas por resonancia magnética (4D flow)”. XIV Jornadas de Mecánica Computacional 2015, Concepción, Chile, 2015.

J. Urbina, J. Sotelo, C. Montalba, **C. Tejos, P. Irarrázaval, M. Andía**, I. Valverde, **S. Uribe**. “Systolic pressure gradients derived from 4D flow in a physiological healthy and aortic coarctation phantom versus cardiac catheterization”. Proceedings 23rd International Conference of the ISMRM, Toronto, Canadá, 2015.

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J. Sotelo, I. Ververde, P. Beerbaum, H. Grotenhuis, G. Greil, T. Schaeffter, R. Razavi, D. Hurtado, **S. Uribe**, C. Alberto Figueroa. “Pressure gradient prediction in aortic coarctation using a computational-fluid-dynamics model: validation against invasive pressure catheterization at rest and pharmacological stress”. ISMRM 23th Annual Meeting & Exhibition, Toronto, Canada. May 30 – June 5. 2015.

S. Uribe, J. Urbina, J. Sotelo, D. Springmuller. “Replica realística de la aorta torácica para validar parámetros hemodinámicos desde datos de resonancia magnética: comparación con datos de pacientes con coartación aortica utilizando cateterización”. XXV Congreso Interamericano de Cardiología y Cirugía Cardiovascular / LII Congreso Chileno de Cardiología y Cirugía Cardiovascular. Santiago, Chile. Dic 4 -7. (Oral). 2015.



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S. Uribe, J. Sotelo, I. Valverde, R. Razavi, A. Figueroa. “Predicción de los gradientes de presión en pacientes con coartación aortica usando modelos computacionales de dinámica de fluidos (CFD): Validación contra cateterismos en reposo y estrés farmacológico”. XXV Congreso Interamericano de Cardiología y Cirugía Cardiovascular / LII Congreso Chileno de Cardiología y Cirugía Cardiovascular. Santiago, Chile. Dic 4 -7. (Oral). 2015.

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Phinikaridou A, Lacerda S, **Andía ME**, Botnar RM. “Development of a tropoelastin-binding MR contrast agent for in vivo imaging of impaired elastogenesis in atherosclerosis”. Proceedings of the 2015 SCMR/Euro CMR Joint Scientific Sessions, Nice. J Cardiovasc Magn Reson 2015; 17(Suppl 1), O102.



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