

Scientific Publications

Peer-reviewed international journals

- A.1. Ramirez, F.D., **Meo, M.**, Dallet, C., Krisai, P., Vlachos, K., Frontera, A. Takigawa, M., Nakatani, Y., Nakashima, T., André, C., Kamakura, T., Takagi, T., Carapezzi, A., Tixier, R., Chauvel, R., Cheniti, G., Duchateau, J., Pambrun, T., Sacher, F., Hocini, M., Haïssaguerre, M., Jaïs, P., Dubois, R. and Derval, N. (2022) High-resolution mapping of reentrant atrial tachycardias: Relevance of low bipolar voltage, *Heart Rhythm*, 20(3), 430-437, <https://doi.org/10.1016/j.hrthm.2022.11.003>.
- A.2. Pambrun, T., Derval, N., Duchateau, J., Ramirez, F.D., Chauvel, R., Tixier, R., Marchand, H., Bouyer, B., Welte, N., André, C., Nakashima, T., Nakatani, Y., Kamakura, T., Takagi, T., Krisai, P., Ascione, C., Balbo, C., Cheniti, G., Vlachos, K. Bourier, F. Takigawa, M., Takeshi Kitamura, T., Frontera, A., **Meo, M.**, Denis, A., Sacher, F., Hocini, M. Jaïs, P. and Haïssaguerre, M. (2022) Sinus node exit, crista terminalis conduction, interatrial connection, and wavefront collision: Key features of human atrial activation in sinus rhythm, *Heart Rhythm*, 19(5), 701-709, <https://doi.org/10.1016/j.hrthm.2022.01.016>.
- A.3. **Meo, M.**, Denis, A., Sacher, F., Duchateau, J., Cheniti, G., Puyo, S., Bear, L., Jaïs, P., Hocini, M., Haïssaguerre, Bernus, O., and Dubois, R. (2020) Insights Into the Spatiotemporal Patterns of Complexity of Ventricular Fibrillation by Multilead Analysis of Body Surface Potential Maps, *Frontiers in Physiology*, 11, 1116, <https://doi.org/10.3389/fphys.2020.554838>.
- A.4. Comelli, M. **Meo, M.**, Cervantes, D. O., Pizzo, E., Ploskern A., Hund, T. J., Jacobson, J.T., Meste, O., and Rota, M. (2020) Rhythm Dynamics of the Aging Heart: an Experimental Study Using Conscious, Restrained Mice, *American Journal of Physiology-Heart and Circulatory Physiology*, <https://doi.org/10.1152/ajpheart.00379.2020>.
- A.5. **Meo, M.**, Bonizzi, P., Bear, L. Cluitmans, M., Abell, E., Haïssaguerre, M., Bernus, O., and Dubois, R. (2020), Body Surface Mapping of Ventricular Repolarization Heterogeneity: An Ex-vivo Multiparameter Study, *Frontiers in Physiology*, 11, 933, <https://doi.org/10.3389/fphys.2020.00933>.
- A.6. Roney, C. H., Pashaei, A., **Meo, M.**, Dubois, R., Boyle, P. M., Trayanova, N. A., Cochet, H., Niederer, S. A. and Vigmond E. J. (2019), Universal Atrial Coordinates Applied to Visualisation, Registration and Construction of Patient Specific Meshes, *Medical Image Analysis*, 55: 65-75, <https://doi.org/10.1016/j.media.2019.04.004>.
- A.7. **Meo, M.**, Meste, O., Signore, S. and Rota, M. (2019), Novel Methods for High-resolution Assessment of Cardiac Action Potential Repolarization, *Biomedical Signal Processing and Control*, 51: 30-41, <https://doi.org/10.1016/j.bspc.2019.02.003>.
- A.8. Roney, C.H., Pashaei, A., **Meo, M.**, Dubois, R., Boyle, P. M., Trayanova, N. A., Cochet, H., Niederer, S. A. and Vigmond, E. J. (2018) Universal Atrial Coordinates Applied to Visualisation, Registration and Construction of Patient Specific Meshes, *arXiv preprint*, [arXiv:1810.06630](https://arxiv.org/abs/1810.06630).
- A.9. Cheniti, G., Vlachos, K., **Meo, M.**, Puyo, S., Thompson, N., Denis, A., Duchateau, J., Takigawa, M., Martin, C., Frontera, A., Kitamura, T., Lam, A., Bourier, F., Klotz, N., Derval, N., Sacher, F., Jaïs, P., Dubois, R., Hocini, M. and Haïssaguerre, M. (2018), Mapping and Ablation of Idiopathic Ventricular Fibrillation, *Frontiers in Cardiovascular Medicine*, 5:123, <https://doi.org/10.3389/fcvm.2018.00123>.

- A.10. Saha, M., Roney, C. H. Bayer, J. D., **Meo, M.**, Cochet, H., Dubois, R. and Vigmond, E. J. (2018), Wavelength and Fibrosis Affect Phase Singularity Locations during Atrial Fibrillation, *Frontiers in Physiology*, 9:1207, <https://doi.org/10.3389/fphys.2018.01207>
- A.11. **Meo, M.**, Pambrun, T., Derval, N., Dumas-Pomier, C., Puyo, S., Duchateau, J., Jaïs, P., Hocini, M., Haïssaguerre, M., and Dubois, R., Noninvasive Assessment of Atrial Fibrillation Complexity in Relation to Ablation Characteristics and Outcome (2018) *Frontiers in Physiology*, 9:929, <https://doi.org/10.3389/fphys.2018.00929>.
- A.12. Roney, C.H., Bayer, J.D., Cochet, H., **Meo, M.**, Dubois, R., Jaïs, P. and Vigmond, E. J. (2018) Variability in Pulmonary Vein Electrophysiology and Fibrosis Determines Arrhythmia Susceptibility and Dynamics. *PLOS Computational Biology*, 14(5):e1006166, <https://doi.org/10.1371/journal.pcbi.1006166>.
- A.13. Hidalgo-Muñoz, A.R., Latcu, D.G., **Meo, M.**, Meste O., Popescu I., Saoudi N., Zarzoso V. (2017) Spectral and Spatiotemporal Variability ECG parameters Linked to Catheter Ablation Outcome in Persistent Atrial Fibrillation. *Computers in Biology and Medicine*, 88:126-131, <https://doi.org/10.1016/j.combiomed.2017.07.004>.
- A.14. Sorrentino, A., Borghetti, G., Zhou, Y., Cannata, A., **Meo, M.**, Signore, S., Anversa, P., Leri, A., Goichberg, P., Qanud, K., Jacobson, J.T., Hintze, T. H. and Rota, M. (2016) Hyperglycemia Induces Defective Ca²⁺ Homeostasis in Cardiomyocytes. *American Journal of Physiology-Heart and Circulatory Physiology*, 312(1):H150-161, <https://doi.org/10.1152/ajpheart.00737.2016>.
- A.15. Roney, C.H., Bayer, J.D., Zahid, S., **Meo, M.**, Boyle, P.M., Trayanova, N.A., Haïssaguerre, M., Dubois, R., Cochet, H. and Vigmond, E.J. (2016) Modeling Methodology of Atrial Fibrosis Affects Rotor Dynamics and Electrograms. *Europace*, 18(4):iv146-iv155, <https://doi.org/10.1093/europace/euw365>.
- A.16. Elgendi, M., **Meo, M.** and Abbott, D. (2016) A Proof-of-Concept Study: Simple and Effective Detection of P and T Waves in Arrhythmic ECG Signals. *Bioengineering*, 3(4), 26, <https://doi.org/10.3390/bioengineering3040026>.
- A.17. **Meo, M.**, Meste, O., Signore, S., Sorrentino, A., Cannata, A., Zhou, Y., Matsuda, A., Luciani, M., Kannappan, R., Goichberg, P., Leri, A., Anversa, P. and Rota, M. (2016) Reduction in K_v Current Enhances the Temporal Dispersion of the Action Potential in Diabetic Myocytes: Insights from a Novel Repolarization Algorithm. *Journal of the American Heart Association*, 5(2). pii: e003078, <https://doi.org/10.1161/JAHA.115.003078>.
- A.18. Sorrentino, A., Signore, S., Qanud, K., Borghetti, G., **Meo, M.**, Cannata, A., Zhou, Y., Wybieralska, E., Luciani, M., Kannappan, R., Zhang, E., Matsuda, A., Webster, A., Cimini, M., Kertowidjojo, E., D'Alessandro, D. A., Wunimenghe, O., Michler, R. E., Royer, C., Goichberg, P., Leri, A., Barrett, E. G., Anversa, P., Hintze, T. H. and Rota, M. (2016) Myocyte repolarization modulates myocardial function in aging dogs. *American Journal of Physiology-Heart and Circulatory Physiology*, 310(7):H873-890, <https://doi.org/10.1152/ajpheart.00682.2015>.
- A.19. Zarzoso, V., D. G. Latcu, A. R. Hidalgo-Muñoz, **Meo, M.**, Meste, O., Popescu, I. and Saoudi, N. (2016) Noninvasive Prediction of Catheter Ablation Outcome in Persistent Atrial Fibrillation by Fibrillatory Wave Amplitude Computation in Multiple ECG Leads. *Archives of Cardiovascular Diseases*, 109(12):679-688, <https://doi.org/10.1016/j.acvd.2016.03.002>.
- A.20. Signore, S., Sorrentino, A., Borghetti, G., Cannata, A., **Meo, M.**, Zhou, Y., Kannappan, R., Pasqualini, F., O'Malley, H., Sundman, M., Tsigikas, N., Zhang, E., Arranto, C., Mangiaracina, C., Isobe, K., Sena, B., Kim, J., Goichberg, P., Nahrendorf, M., Isom, L. L., Leri, A., Anversa, P. and Rota, M. (2015) The late Na⁺ current and the protracted

- electrical recovery are critical determinants of the aging myopathy. *Nature Communications*, 6:8003. <https://doi.org/10.1038/ncomms9803>.
- A.21. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G., and Saoudi, N. (2013) Catheter Ablation Outcome Prediction in Persistent Atrial Fibrillation Using Weighted Principal Component Analysis. *Biomedical Signal Processing and Control*, 8(6):958-968, <https://doi.org/10.1016/j.bspc.2013.02.002>.
- A.22. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G., and Saoudi, N. (2013) Spatial Variability of the 12-Lead Surface ECG as a Tool for Noninvasive Prediction of Catheter Ablation Outcome in Persistent Atrial Fibrillation. *IEEE Transactions on Biomedical Engineering*, 60(1):20-27, <https://doi.org/10.1109/TBME.2012.2220639>.

Peer-reviewed international conference proceedings

- A.1. **Meo, M.**, Bonizzi, P., Bear, L., Cluitmans, M., Abell, E., Haïssaguerre, M. Bernus, O. and Dubois, R. (2020), Relation of surface T-wave to vulnerability to ventricular fibrillation in explanted structurally normal hearts, *In. Computing in Cardiology (Cinc) 2020*, 47, 1-4, Rimini, Italy.
- A.2. **Meo, M.**, Duchateau, J., Bayer, J., Pambrun, T., Roney, C.H., Vigmond, E.J., Derval, N., Denis, A., Jaïs, P., Hocini, M., Haïssaguerre, M. and Dubois, R. (2019) An Automated Platform to Standardize Position in the Left Atrium and Map Electrophysiological Data *In. Computing in Cardiology (Cinc) 2019*, 46: 1-4, Singapore, Singapore.
- A.3. Tan, N. Bear, L., Potse, M., Puyo, S., **Meo, M.** and Dubois, R. (2019) Analysis of Signal-Averaged Electrocardiogram Performance for Body Surface Recordings *In. Computing in Cardiology (Cinc) 2019*, 46: 1-4, Singapore, Singapore.
- A.4. **Meo, M.**, Dumas-Pomier, C., Hocini, M., Haïssaguerre, M. and Dubois, R. (2018) Atrial Fibrillation Spatiotemporal Complexity Is Affected by Pulmonary Vein Isolation *In. Computing in Cardiology (Cinc) 2018*, 45: 1-4, Maastricht, the Netherlands.
- A.5. **Meo, M.**, Potse, M., Puyo, S., Bear, L., Hocini, M., Haïssaguerre, M., and Dubois, R. (2017) Non-Invasive Assessment of Spatiotemporal Organization of Ventricular Fibrillation through Principal Component Analysis, *In. Computing in Cardiology (Cinc) 2017*, 44: 1-4, Rennes, France.
- A.6. Roney, C.H., Bayer, J.D., Dubois, R., **Meo, M.**, Cochet, H., Jaïs, P., and Vigmond, E. (2017) The Combination of Pulmonary Vein Electrophysiology and Atrial Fibrosis Determines Driver Location, *In. Computing in Cardiology (Cinc) 2017*, 44: 1-4, Rennes, France.
- A.7. Meste, O., **Meo, M.**, Signore, S. and Rota, M. (2016) A New Tool for the Action Potential Repolarization Dynamic Analysis: Application to the Discrimination of Diabetic and Control Cells, *In. Computing in Cardiology (Cinc) 2016*, 43: 261-264, Vancouver, Canada.
- A.8. Dallet, C., Duchateau, J., Hocini, M., Bear, L., **Meo, M.**, Sacher, F., Haïssaguerre, M., and Dubois, R. (2016) Combined Signal Averaging and Electrocardiographic Imaging Method to Non-Invasively Identify Atrial and Ventricular Tachycardia Mechanisms, *In. Computing in Cardiology (Cinc) 2016*, Canada, 43: 1-4, Vancouver.
- A.9. **Meo, M.**, Hidalgo-Muñoz, A. R., Zarzoso, V., Meste, O., Latcu, D. G., and Saoudi, N. (2015) F-wave Amplitude Stability on Multiple Electrocardiogram Leads in Atrial Fibrillation. *In. Computing in Cardiology (Cinc) 2015*, 42:505-508, Nice, France.
- A.10. Meste, O., **Meo, M.**, Signore, S. and Rota, M. (2015) Diabetes Affects the Temporal Dynamics of the Repolarization Properties of Cardiomyocytes. *In. Computing in Cardiology (Cinc) 2015*, 42:153-156, Nice, France.

- A.11. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G., and Saoudi, N. (2014), Joint Entropy for Spatial Information Retrieval from Orthogonal Heart Planes Improves Catheter Ablation Outcome Prediction in Persistent Atrial Fibrillation. *In. Computing in Cardiology (Cinc) 2014*, 41:901-904, Cambridge, MA, USA.
- A.12. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G., Saoudi, N. and Barbieri, R. (2013) Point Process Modeling of R-R Interval Dynamics during Atrial Fibrillation. *In. Computing in Cardiology (Cinc) 2013*, 40:1043-1046, Zaragoza, Spain.
- A.13. Zarzoso, V. **Meo, M.** and Meste, O. (2013) Low-rank Signal Approximations with Reduced Error Dispersion. *In. Signal Processing Conference (EUSIPCO), 2013 Proceedings of the 21st European*, 1-5, Marrakech, Morocco.
- A.14. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G., and Saoudi, N. (2013), Noninvasive Prediction of Catheter Ablation Acute Outcome in Persistent Atrial Fibrillation Based on Logistic Regression of ECG Fibrillatory Wave Amplitude and Spatio-temporal Variability. *In. Engineering in Medicine and Biology Society (EMBC), 2013 35th Annual International Conference of the IEEE*, 5821-5824, Osaka, Japan.
- A.15. Laouini, G., Meste, O., and **Meo, M.**, Analysis of Heart Rate Variability Using Time-Varying Filtering of Heart Transplanted Patients. *In. Engineering in Medicine and Biology Society (EMBC), 2012 34th Annual International Conference of the IEEE*, 3436-3439, San Diego, CA.
- A.16. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G., and Saoudi, N. (2012) Multidimensional Characterization of Fibrillatory Wave Amplitude on Surface ECG to Describe Catheter Ablation Impact on Persistent Atrial Fibrillation. *In. Engineering in Medicine and Biology Society (EMBC), 2012 34th Annual International Conference of the IEEE*, 617-620, San Diego, CA, USA.
- A.17. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G., and Saoudi, N. (2012), Nonnegative Matrix Factorization for Noninvasive Prediction of Catheter Ablation Outcome in Persistent Atrial Fibrillation. *In. Acoustics, Speech and Signal Processing (ICASSP), 2012 IEEE International Conference on*, 601-604, Kyoto, Japan.
- A.18. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G., and Saoudi, N. (2011) Catheter Ablation Outcome Prediction in Persistent Atrial Fibrillation Based on Spatio-Temporal Complexity Measures of the Surface ECG. *In. Computing in Cardiology (Cinc) 2011*, 38:261-265, Hangzhou, China.
- A.19. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G., and Saoudi, N. (2011) Non-invasive Prediction of Catheter Ablation Outcome in Persistent Atrial Fibrillation by Exploiting the Spatial Diversity of Surface ECG. *In. Engineering in Medicine and Biology Society (EMBC), 2011 33rd Annual International Conference of the IEEE*, 5531-5534, Boston, MA, USA.

International conference abstracts

- A.1. Comelli, M., Pizzo, E., **Meo, M.**, Cervantes, D.O., Plosker, A., Faltas, B., Jacobson, J.T., Meste, O., and Rota, M. (2020) Sinus Rhythm Dynamics and Ventricular Ectopy in an Experimental Model of Aging, *American Heart Association (AHA), Circulation Supp. 3*, 142:A16545.
- A.2. Pizzo, E., Cervantes, D.O., Comelli, M., **Meo, M.**, Meste, O., Jacobson, J.T., and Rota, M. (2020) Activation of Notch Signaling in the Heart Promotes Electrical Disturbances, *American Heart Association (AHA), Circulation Supp.3*, 142:A16545.
- A.3. Pasdois, P., Häberlin, A., Ploux, S., Mahamat, H.A., **Meo, M.**, Dubois, R., Guillot, B., Recalde, A., Walton, R., Pallares Lupon, N., Bevilacqua, M., Gontier, E., Virginie, L.,

- Gonthier, D., Cassiat-Morisset, G., Meillet, V., Hocini, M., Bernus, O., Dos Santos, P. and Jaïs, P. (2019) Study of Electrophysiological, Structural, and Mitochondrial Metabolism Remodelling in a Sheep Model of Atrial Fibrillation Monitored by Telemetry, *Printemps de la Cardiologie 2020* (virtual event).
- A.4. Comelli, M., **Meo, M.**, Cervantes, D. O., Pizzo, E., Plosker, A., Hund, T. H., Jacobson, J., Meste, O. and Rota, M. (2020) Influence of Aging and Na Channels on Sinus Rhythm and Heart Rate Variability, *Basic Cardiovascular Sciences 2020 Scientific Sessions*, USA (virtual event).
- A.5. **Meo, M.**, Bear, L., Abell, E., Cluitmans, M., Jaïs, P., Hocini, M., Haïssaguerre, M., Bernus, O. and Dubois, R. (2020) Noninvasive Tracking of Repolarization Gradients as A Substrate for Ventricular Fibrillation, *Heart Rhythm Society Congress 2020*, 17(5)-S383-S476, San Diego, CA, USA (virtual event).
- A.6. Cervantes, D. O., Dorilio, J., Cianflone, E., **Meo, M.**, Hund, T. J., Meste, O., Jacobson, J.T., and Rota, M. (2019) The Late Sodium Current Modulates Diastolic Function, *Circulation, AHA American Heart Association 2019*, 140(1S): A14958, Philadelphia, PA, USA.
- A.7. **Meo, M.**, Denis, A., Sacher, F., Duchateau, J., Cheniti, G., Puyo, S., Bernus, O., Jaïs, P., Hocini, M., Haïssaguerre, M. and Dubois, R. (2019) Multilead Analysis of Body Surface Potential Maps Reveal Different Patterns of Complexity of Ventricular Fibrillation in Structurally Normal and Abnormal Human Hearts, *Heart Rhythm Society Congress 2019*, 16(5S): S426–S521, San Francisco, CA, USA.
- A.8. **Meo, M.**, Pambrun, T., Derval, N., Dumas-Pomier, C., Duchateau, J., Jaïs, P., Hocini, M., Haïssaguerre, M., and Dubois, R. (2019) Body Surface Atrial Fibrillation Complexity Correlates with Atrial Substrate Electrophysiology and Ablation Impact and Strategy, *Heart Rhythm Society Congress 2019*, 16(5S): S1-S712, San Francisco, CA, USA.
- A.9. **Meo, M.**, Pambrun, T., Derval, N., Dumas-Pomier, C., Dallet, C., Duchateau, J., Jaïs, P., Hocini, M., Haïssaguerre, M., and Dubois, R. (2019) Spatial Characteristics of Fibrillatory Wave Loops Correlate with Atrial Fibrillation Complexity and Drivers, *Heart Rhythm Society Congress 2019*, 16(5S): S591–S632, San Francisco, CA, USA.
- A.10. Cheniti, G., Ashikaga, H., Puyo, S., Duchateau, J., Denis, A., **Meo, M.**, Martin, C. A., Lam, A., Vlachos, K. G., Kitamura, T., Takigawa, M., Frontera, A., Bourier, F., Pambrun, T., Derval, N., Sacher, F., Cochet, H., Jaïs, P., Bernus, O., Dubois, R., Hocini, M., and Haïssaguerre, M. (2019) Signatures Of Communication Network Topology Associated With Spontaneous Termination Of Ventricular Fibrillation, *Heart Rhythm Society Congress 2019*, 16(5S): S330-S425, San Francisco, CA, USA.
- A.11. **Meo, M.**, Pambrun, T., Derval, N., Dumas-Pomier, C., Puyo, S., Duchateau, J., Jaïs, P., Hocini, M., Haïssaguerre, M. and Dubois, R. (2018) Noninvasive Assessment of Atrial Fibrillation Complexity in Relation with Ablation Characteristics and Outcome. *Heart Rhythm Society Congress 2018*; 15(5S): S1-S107, Boston, MA, USA.
- A.12. **Meo, M.**, Denis, A., Sacher, F., Duchateau, J., Puyo, S., Dumas-Pomier, C., Bernus, O., Jaïs, P., Hocini, M., Haïssaguerre, M. and Dubois, R. (2018) A Noninvasive Approach to Evaluate the Spatiotemporal Complexity of Ventricular Fibrillation and Prediction Of Spontaneous Termination. *Heart Rhythm Society Congress 2018*; 15(5S): S388-S487, Boston, MA, USA.
- A.13. Haïssaguerre, M., Hocini, M., Puyo, S., Cheniti, G., Duchateau, J., Denis, A., Cochet, H., **Meo, M.**, Kitamura, T., Takigawa, M., Frontera, A., Vlachos, K. G., Massoullie, G., Lam, A., Bourier, F., Pambrun, T., Welte, N., Derval, N., Amraoui, S., Klotz, N., Sacher, F., Bordachar, P., Ploux, S., Ritter, P., Jaïs, P., Vigmond, E. J., Potse, M., Walton, R. D., Dubois, R. and Bernus, O. (2018) Trigger And Substrate Share A Common Location In

- Human VF. *Heart Rhythm Society Congress 2018*; 15(5S): S641-S657, Boston, MA, USA.
- A.14. Haïssaguerre, M., Duchateau, J., Cheniti, G., Puyo, S., Denis, A., Cochet, H., **Meo, M.**, Kitamura, T., Takigawa, M., Frontera, A., Vlachos, K. G., Massoullie, G., Lam, A., Bourier, F., Pambrun, T., Welte, N., Derval, N., Amraoui, S., Klotz, N., Sacher, F., Bordachar, P., Ploux, S., Ritter, P., Jaïs, P., Vigmond, E. J., Potse, M., Walton, R. D., Dubois, R., Bernus, O. and Hocini, M. (2018) Distinct Characteristics Of Human Ventricular Fibrillation In Its Initial Phase. *Heart Rhythm Society Congress 2018*; 15(5S): S488-S589, Boston, MA, USA.
- A.15. Bear, L., **Meo, M.**, Abell, E., Michel, C., Pourtau, L., Coronel, R., Walton, R. D., Martinez, M. E., Charron, S., Magat, J., Cros, C., Benoist, D., Pascarel-Auclerc, C., Pasdois, P., Vaillant, F., Chaigne, S., Dubes, V. N., Diolez, P., Stuyvers, B., Quesson, B., Roger, J., Brette, F., Labrousse, L., Duchateau, J., Hocini, M. Haïssaguerre, M., Bernus, O. and Dubois, R. (2018) Insights into Human Ventricular Fibrillation using Simultaneous Epicardial and Body Surface Recordings in a Torso Tank. *Heart Rhythm Society Congress 2018*; 15(5S): S284-S387, Boston, MA, USA.
- A.16. Roney, C. H., Pashaei, A., **Meo, M.**, Dubois, R., Boyle, P., Trayanova, N., Cochet, H., Niederer, S. and Vigmond, E. (2018) Universal atrial coordinates for visualisation, registration and construction of patient specific geometries. *Heart Rhythm Society Congress 2018*; 15(5S): S108–S177, Boston, MA, USA.
- A.17. Roney, C.H., Bayer, J.D., **Meo, M.**, Haïssaguerre, M., Dubois, R. and Vigmond, E. J. (2017) Calibrating conduction velocity improves fibrosis modeling for predicting patient-specific phase singularity locations. *Heart Rhythm Society Congress 2017*; 14(5S): S1-S93, Chicago, IL, USA.
- A.18. Dallet, C., Duchateau, J., Méléze Hocini, M., Dumas-Pomier, C., Puyo, S. **Meo, M.**, Martin, R., Sacher, F., Haïssaguerre, M., Dubois, R. (2017). Combined Cardiac Conduction Velocity Mapping and Electrocardiographic Imaging to Non-Invasively Identify Atrial Tachycardia Mechanisms. *Heart Rhythm Society Congress 2017*; 14(5S), S305, Chicago, IL, USA.
- A.19. **Meo, M.**, Yamashita, S., Duchateau, J., Meillet, V., Pomier, C., Hocini, M., Haïssaguerre, M., and Dubois, R. (2016) Atrial electrogram assessment in relation with noninvasive reentry mapping in atrial fibrillation. *Heart Rhythm Society Congress 2016*; 12 (5S): S97–S165, San Francisco, CA, USA.
- A.20. Duchateau, J., **Meo, M.**, Sacher, F., Denis, A., Derval, N., Hocini, M. Haïssaguerre, M., and Dubois, R. (2016) In-vivo Evaluation of ECGi. *Heart Rhythm Society Congress 2016*; 12 (5S): S97–S165, San Francisco, CA, USA.
- A.21. Signore, S., Borghetti, G., R. Kannappan, Sorrentino, A., Cannata, A., **Meo, M.**, Zhou, Y., Mangiaracina, C., Pasqualini, F., Alesi, N., Sena, B. F., Nahrendorf, M., Goihberg, P., Leri, A. Anversa, P., and Rota, M. (2014) Ionic Current Remodeling Delays the Electrical Recovery of the Senescent Heart. *Circulation, AHA American Heart Association 2014*, 130(2S): A17272, Chicago, IL, USA.
- A.22. **Meo, M.**, Latcu, D.G., Zarzoso, V., Meste, O., Garibaldi, M., Popescu, I. and Saoudi, N. (2013) Automatic Multilead Characterization of F-wave Amplitude Enhances Prediction of Catheter Ablation Outcome in Persistent Atrial Fibrillation. *EHRA EUROPACE 2013*, Athens, Greece.
- A.23. **Meo, M.**, Latcu, D.G., Zarzoso, V., Meste, O., Garibaldi, M., Popescu, I. and Saoudi, N. (2012) Mathematical Analysis of Atrial Spatiotemporal Complexity on Standard ECG for Catheter Ablation Outcome Prediction in Persistent Atrial Fibrillation. *Europace (2013)*, 15 (S2), S182, Munich, Germany.

- A.24. **Meo, M.**, Latcu, D.G., Zarzoso, V., Meste, O., Garibaldi, M., Popescu, I. and Saoudi, N. (2012) ECG Spatiotemporal Complexity Predicts Catheter Ablation Outcome in Persistent Afib. *CARDIOSTIM 2012*, Nice, France.
- A.25. Garibaldi, M., Zarzoso, V., Latcu, D.G., **Meo, M.**, Meste, O., Popescu, I., and Saoudi, N. (2012) Persistent Atrial Fibrillation Dominant Frequency on Standard ECG Predicts Catheter Ablation Outcome. *CARDIOSTIM 2012*, Nice, France.

Ph.D. thesis

- A.26. **Meo, M.** (2014) Surface ECG spatio-temporal analysis for atrial fibrillation treatment, *LAP LAMBERT Academic Publishing*, pp. 216, 978-3-8473-3539-9.

Workshops and seminars

- A.27. **Meo, M.**, Technical Aspects and Clinical Applications of Multivariate Analysis of Body Surface Cardiac Signals, *LIRYC Cardiac Electrophysiology Summer School*, Pessac, France, 2019.
- A.28. **Meo, M.**, Yamashita, S., Duchateau, J., Meillet, V., Pomier, C., Hocini, M., Haïssaguerre, M., and Dubois, R., Atrial electrogram assessment in relation with noninvasive reentry mapping in atrial fibrillation, *LIRYC International Workshop*, Pessac, France, Oct. 29-30 2016.
- A.29. **Meo, M.**, Signal processing strategies for the investigation of heart electrical disturbances, *LIRYC*, Pessac, France, 2015.
- A.30. **Meo, M.**, Signore, S., Borghetti, G., Sorrentino, A., Zhou, Y., and Rota, M. Prolongation of the Action Potential in Cardiomyocytes Contributes to the Protracted Electrical Recovery of the Diabetic Heart, *Brigham Research Institute Cardiovascular, Diabetes and Metabolic Disorders (BRI CVDM) Research Center Annual Obesity Research Incubator Session*, Boston, MA, USA, April 29 2015.
- A.31. **Meo, M.**, Reduced K⁺ Outward Current in Cardiomyocytes Contributes to the Protracted Electrical Recovery of the Diabetic Heart, Meo, M., Signore, S., Borghetti, G., A. Sorrentino, A., Zhou, Y., Matsuda, A. and Rota, M., *Harvard Poster Evening*, Boston, MA, USA, Nov. 10 2014.
- A.32. **Meo, M.**, Zarzoso, V., Meste, O., Latcu, D. G. and Saoudi, N., Non-invasive Prediction of Catheter Ablation Outcome in Persistent Atrial Fibrillation: Exploiting the Spatial Variability of the F-wave Amplitude in the Surface ECG (best poster, 1st prize), *8th IEEE-EMBS International Summer School on Biomedical Signal Processing*, Siena, Italy, 2012.

Invited Presentations

- A.33. Barbieri, R., **Meo, M.**, and Bianchi, A.M. (2016) Identification of CVD Risk through Physiological Parameters, Engineering in Medicine and Biology Society (EMBC), 2016 38th Annual International Conference of the IEEE, special session: Research And Innovation Forum. Needs and Trends in Algorithms for P-Health Solutions Addressing CVD Management, Orlando, FL, USA.
- A.34. **Meo, M.**, Spatio-temporal Characterization of Surface Electrocardiogram for Atrial Fibrillation Management and Treatment, *NIMBioS Investigative Workshop: Heart Rhythm Disorders*, Knoxville, TN, USA, Dec. 2 2014.
- A.35. **Meo, M.**, Spatio-temporal assessment of AF complexity by principal component analysis, First European Conference for Standardization of Advanced ECG Analysis in Arrhythmia Diagnostics, Focus: Quantification of the Atrial Fibrillation Substrate Complexity, Lugano, Switzerland, Dec. 4 2013.

- A.36. **Meo, M.**, Multidimensional Characterization of the Standard ECG to Predict Catheter Ablation Outcome in Persistent Atrial Fibrillation, Science Academy, Warsaw, Poland, Dec. 9 2011.
- A.37. **Meo, M.**, Noninvasive Prediction of Catheter Ablation Outcome in Persistent Atrial Fibrillation: State of the Art and New Perspectives, *Journée Fibrillation auriculaire: de l'ablation au traitement de l'information*, Paris, France, Oct. 19 2011.