

# Scientific contributions

Dr Xavier Derkx

March 31, 2020

## Academic publications

- [3] **X. Derkx**, *Étude de la fission d'actinides produits par réactions de transfert multinucléon en cinématique inverse*, Ph.D. thesis, Université de Caen Basse-Normandie – GANIL (Caen) (Oct 2010)
- [2] **X. Derkx**, *Propagation of ultra-high energy protons through the Galaxy*, Master's thesis, Université Louis Pasteur – Laboratoire Astroparticule et Cosmologie (Paris) (Jun 2007)
- [1] **X. Derkx**, *Electroweak baryogenesis*, Master's thesis, Université Paris-Sud XI – Nikhef (Amsterdam) (Aug 2006)

## Peer-reviewed articles

- [23] Delayed or absent  $\pi(h_{11/2})^2$  alignment in  $^{111}\text{Xe}$ .  
L. Capponi, J. F. Smith, P. Ruotsalainen, C. Scholey, P. Rahkila, L. Bianco, A. J. Boston, H. C. Boston, D. M. Cullen, **X. Derkx**, M. C. Drummond, T. Grahn, P. T. Greenlees, L. Grocott, B. Hadinia, U. Jakobsson, D. T. Joss, R. Julin, S. Juutinen, M. Labiche, M. Leino, K. G. Leach, C. McPeake, K. F. Mulholland, P. Nieminen, D. O'Donnell, E. S. Paul, P. Peura, M. Sandzelius, J. Sarén, B. Saygi, J. Sorri, S. Stolze, A. Thornthwaite, M. J. Taylor, and J. Uusitalo.  
*Phys. Rev. C* **101**, 014313 (Jan 2020)
- [22] Lifetime measurements of  $N \simeq 20$  phosphorus isotopes using the AGATA  $\gamma$ -ray tracking spectrometer.  
L. Grocott, R. Chapman, M. Bouhelal, F. Haas, A. Goasduff, J. F. Smith, S. Courtin, D. Bazzacco, T. Braunroth, L. Capponi, L. Corradi, **X. Derkx**, P. Desesquelles, M. Doncel, E. Fioretto, A. Gottardo, V. Liberati, B. Melon, D. Mengoni, C. Michelagnoli, T. Mijatović, V. Modamio, G. Montagnoli, D. Montanari, K. F. Mulholland, D. R. Napoli, C. Petrache, A. Pipidis, F. Recchia, E. Sahin, P. P. Singh, A. M. Stefanini, S. Szilner, and J. J. Valiente-Dobón.  
*Phys. Rev. C* **100**, 064308 (Dec 2019)
- [21]  $\alpha$ -decay properties of  $^{200,202}\text{Fr}$ .  
L. Ghys, A. N. Andreyev, M. Huyse, P. Van Duppen, S. Antalic, A. Barzakh, L. Capponi, T. E. Cocolios, J. Cubiss, **X. Derkx**, H. De Witte, J. Elseviers, F. P. Hessberger, Z. Kalaninová, U. Köster, J. F. W. Lane, V. Liberati, S. Mitsuoka, Y. Nagame, K. Nishio, S. Ota, D. Pauwels, R. D. Page, L. Popescu, D. Radulov, M. M. Rajabali, E. Rapisarda, K. Sandhu, V. L. Truesdale, P. Van den Bergh, and Y. Wakabayashi.  
*Phys. Rev. C* **100**, 054310 (Nov 2019)
- [20] Inverse odd-even staggering in nuclear charge radii and possible octupole collectivity in  $^{217,218,219}\text{At}$  revealed by in-source laser spectroscopy.  
A. E. Barzakh, J. G. Cubiss, A. N. Andreyev, M. D. Seliverstov, B. Andel, S. Antalic, P. Ascher, D. Atanasov, D. Beck, J. Bieroń, K. Blaum, C. Borgmann, M. Breitenfeldt, L. Capponi, T. E. Cocolios, T. Day Goodacre, **X. Derkx**, H. De Witte, J. Elseviers, D. V. Fedorov, V. N. Fedosseev,

S. Fritzsche, L. P. Gaffney, S. George, L. Ghys, F. P. Heßberger, M. Huyse, N. Imai, Z. Kalaninová, D. Kisler, U. Köster, M. Kowalska, S. Kreim, J. F. W. Lane, V. Liberati, D. Lunney, K. M. Lynch, V. Manea, B. A. Marsh, S. Mitsuoka, P. L. Molkanov, Y. Nagame, D. Neidherr, K. Nishio, S. Ota, D. Pauwels, L. Popescu, D. Radulov, E. Rapisarda, J. P. Revill, M. Rosenbusch, R. E. Rossel, S. Rothe, K. Sandhu, L. Schweikhard, S. Sels, V. L. Truesdale, C. Van Beveren, P. Van den Bergh, P. Van Duppen, Y. Wakabayashi, K. D. A. Wendt, F. Wienholtz, B. W. Whitmore, G. L. Wilson, R. N. Wolf, and K. Zuber.

Phys. Rev. C **99**, 054317 (May 2019)

- [19] Fusion reaction  $^{48}\text{Ca} + ^{249}\text{Bk}$  leading to formation of the element Ts ( $Z = 117$ ).  
J. Khuyagbaatar, A. Yakushev, C. E. Düllmann, D. Ackermann, L.-L. Andersson, M. Asai, M. Block, R. A. Boll, H. Brand, D. M. Cox, M. Dasgupta, **X. Derkx**, A. Di Nitto, K. Eberhardt, J. Even, M. Evers, C. Fahlander, U. Forsberg, J. M. Gates, N. Gharibyan, P. Golubev, K. E. Gregorich, J. H. Hamilton, W. Hartmann, R.-D. Herzberg, F. P. Heßberger, D. J. Hinde, J. Hoffmann, R. Hollinger, A. Hübner, E. Jäger, B. Kindler, J. V. Kratz, J. Krier, N. Kurz, M. Laatiaoui, S. Lahiri, R. Lang, B. Lommel, M. Maiti, K. Miernik, S. Minami, A. Mistry, C. Mokry, H. Nitsche, J. P. Omtvedt, G. K. Pang, P. Papadakis, D. Renisch, J. Roberto, D. Rudolph, J. Runke, K. P. Rykaczewski, L. G. Sarmiento, M. Schädel, B. Schausten, A. Semchenkov, D. A. Shaughnessy, P. Steinegger, J. Steiner, E. E. Tereshatov, P. Thörle-Pospiech, K. Tinschert, T. Torres De Heidenreich, N. Trautmann, A. Türler, J. Uusitalo, D. E. Ward, M. Wegrzecki, N. Wiehl, S. M. Van Cleve, and V. Yakusheva.

Phys. Rev. C **99**, 054306 (May 2019)

- [18] Insight into excitation energy and structure effects in fission from isotopic information in fission yields.  
D. Ramos, M. Caamaño, F. Farget, C. Rodríguez-Tajes, L. Audouin, J. Benlliure, E. Casarejos, E. Clement, D. Cortina, O. Delaune, **X. Derkx**, A. Dijon, D. Doré, B. Fernández-Domínguez, G. de France, A. Heinz, B. Jacquot, C. Paradela, M. Rejmund, T. Roger, M.-D. Salsac, and C. Schmitt.  
Phys. Rev. C **99**, 024615 (Feb 2019)

- [17] Charge radii and electromagnetic moments of  $^{195-211}\text{At}$ .  
J. G. Cubiss, A. E. Barzakh, M. D. Seliverstov, A. N. Andreyev, B. Andel, S. Antalic, P. Ascher, D. Atanasov, D. Beck, J. Bieroń, K. Blaum, C. Borgmann, M. Breitenfeldt, L. Capponi, T. E. Cocolios, T. Day Goodacre, **X. Derkx**, H. De Witte, J. Elseviers, D. V. Fedorov, V. N. Fedosseev, S. Fritzsche, L. P. Gaffney, S. George, L. Ghys, F. P. Heßberger, M. Huyse, N. Imai, Z. Kalaninová, D. Kisler, U. Köster, M. Kowalska, S. Kreim, J. F. W. Lane, V. Liberati, D. Lunney, K. M. Lynch, V. Manea, B. A. Marsh, S. Mitsuoka, P. L. Molkanov, Y. Nagame, D. Neidherr, K. Nishio, S. Ota, D. Pauwels, L. Popescu, D. Radulov, E. Rapisarda, J. P. Revill, M. Rosenbusch, R. E. Rossel, S. Rothe, K. Sandhu, L. Schweikhard, S. Sels, V. L. Truesdale, C. Van Beveren, P. Van den Bergh, Y. Wakabayashi, P. Van Duppen, K. D. A. Wendt, F. Wienholtz, B. W. Whitmore, G. L. Wilson, R. N. Wolf, and K. Zuber.  
Phys. Rev. C **97**, 054327 (May 2018)

- [16] Isotopic fission-fragment distributions of  $^{238}\text{U}$ ,  $^{239}\text{Np}$ ,  $^{240}\text{Pu}$ ,  $^{244}\text{Cm}$ , and  $^{250}\text{Cf}$  produced through inelastic scattering, transfer, and fusion reactions in inverse kinematics.  
D. Ramos, M. Caamaño, F. Farget, C. Rodríguez-Tajes, L. Audouin, J. Benlliure, E. Casarejos, E. Clement, D. Cortina, O. Delaune, **X. Derkx**, A. Dijon, D. Doré, B. Fernández-Domínguez, G. de France, A. Heinz, B. Jacquot, A. Navin, C. Paradela, M. Rejmund, T. Roger, M.-D. Salsac, and C. Schmitt.  
Phys. Rev. C **97**, 054612 (May 2018)

- [15]  $\beta$ -delayed fission and  $\alpha$  decay of  $^{196}\text{At}$ .  
V. L. Truesdale, A. N. Andreyev, L. Ghys, M. Huyse, P. Van Duppen, S. Sels, B. Andel, S. Antalic, A. Barzakh, L. Capponi, T. E. Cocolios, **X. Derkx**, H. De Witte, J. Elseviers, D. V. Fedorov,

- V. N. Fedosseev, F. P. Heßberger, Z. Kalaninová, U. Köster, J. F. W. Lane, V. Liberati, K. M. Lynch, B. A. Marsh, S. Mitsuoka, Y. Nagame, K. Nishio, S. Ota, D. Pauwels, L. Popescu, D. Radulov, E. Rapisarda, S. Rothe, K. Sandhu, M. D. Seliverstov, A. M. Sjödin, C. Van Beveren, P. Van den Bergh, and Y. Wakabayashi.  
*Phys. Rev. C* **94**, 034308 (Sep 2016)
- [14] Direct observation of the  $^{114}\text{Ba} \rightarrow ^{110}\text{Xe} \rightarrow ^{106}\text{Te} \rightarrow ^{102}\text{Sn}$  triple  $\alpha$ -decay chain using position and time correlations.  
L. Capponi, J. F. Smith, P. Ruotsalainen, C. Scholey, P. Rahkila, K. Auranen, L. Bianco, A. J. Boston, H. C. Boston, D. M. Cullen, **X. Derkx**, M. C. Drummond, T. Grahn, P. T. Greenlees, L. Grocott, B. Hadinia, U. Jakobsson, D. T. Joss, R. Julin, S. Juutinen, M. Labiche, M. Leino, K. G. Leach, C. McPeake, K. F. Mulholland, P. Nieminen, D. O'Donnell, E. S. Paul, P. Peura, M. Sandzelius, J. Sarén, B. Saygi, J. Sorri, S. Stolze, A. Thorntwaite, M. J. Taylor, and J. Uusitalo.  
*Phys. Rev. C* **94**, 024314 (Aug 2016)
- [13] Recoil- $\alpha$ -fission and recoil- $\alpha$ - $\alpha$ -fission events observed in the reaction  $^{48}\text{Ca} + ^{243}\text{Am}$ .  
U. Forsberg, D. Rudolph, L.-L. Andersson, A. D. Nitto, C. Düllmann, C. Fahlander, J. Gates, P. Golubev, K. Gregorich, C. Gross, R.-D. Herzberg, F. Heßberger, J. Khuyagbaatar, J. Kratz, K. Rykaczewski, L. Sarmiento, M. Schädel, A. Yakushev, S. Åberg, D. Ackermann, M. Block, H. Brand, B. Carlsson, D. Cox, **X. Derkx**, J. Dobaczewski, K. Eberhardt, J. Even, J. Gerl, E. Jäger, B. Kindler, J. Krier, I. Kojouharov, N. Kurz, B. Lommel, A. Mistry, C. Mokry, W. Nazarewicz, H. Nitsche, J. Omtvedt, P. Papadakis, I. Ragnarsson, J. Runke, H. Schaffner, B. Schausten, Y. Shi, P. Thörle-Pospiech, T. Torres, T. Traut, N. Trautmann, A. Türler, A. Ward, D. Ward, and N. Wiehl.  
*Nuclear Physics A* **953**, 117 (Sept 2016)
- [12] Transfer-induced fission in inverse kinematics: Impact on experimental and evaluated nuclear data bases.  
F. Farget, M. Caamaño, D. Ramos, C. Rodriguez-Tajes, K. H. Schmidt, L. Audouin, J. Benlliure, E. Casarejos, E. Clément, D. Cortina, O. Delaune, **X. Derkx**, A. Dijon, D. Doré, B. Fernández-Domínguez, L. Gaudefroy, C. Golabek, A. Heinz, B. Jurado, A. Lemasson, C. Paradela, T. Roger, M. D. Salsac, and C. Schmitt.  
*Eur. Phys. J. A* **51**, 175 (2015)
- [11] Characterization of the scission point from fission-fragment velocities.  
M. Caamaño, F. Farget, O. Delaune, K.-H. Schmidt, C. Schmitt, L. Audouin, C.-O. Bacri, J. Benlliure, E. Casarejos, **X. Derkx**, B. Fernández-Domínguez, L. Gaudefroy, C. Golabek, B. Jurado, A. Lemasson, D. Ramos, C. Rodríguez-Tajes, T. Roger, and A. Shrivastava.  
*Phys. Rev. C* **92**, 034606 (Sep 2015)
- [10] Excitation energy dependence of fragment-mass distributions from fission of  $^{180,190}\text{Hg}$  formed in fusion reactions of  $^{36}\text{Ar} + ^{144,154}\text{Sm}$ .  
K. Nishio, A. Andreyev, R. Chapman, **X. Derkx**, C. Düllmann, L. Ghys, F. Heßberger, K. Hirose, H. Ikezoe, J. Khuyagbaatar, B. Kindler, B. Lommel, H. Makii, I. Nishinaka, T. Ohtsuki, S. Pain, R. Sagaidak, I. Tsekhanovich, M. Venhart, Y. Wakabayashi, and S. Yan.  
*Physics Letters B* **748**, 89 (Sep 2015)
- [9] Evolution of fission-fragment mass distributions in the neutron-deficient lead region.  
L. Ghys, A. N. Andreyev, M. Huyse, P. Van Duppen, S. Sels, B. Andel, S. Antalic, A. Barzakh, L. Capponi, T. E. Cocolios, **X. Derkx**, H. De Witte, J. Elseviers, D. V. Fedorov, V. N. Fedosseev, F. P. Hessberger, Z. Kalaninová, U. Köster, J. F. W. Lane, V. Liberati, K. M. Lynch, B. A. Marsh, S. Mitsuoka, P. Möller, Y. Nagame, K. Nishio, S. Ota, D. Pauwels, R. D. Page, L. Popescu, D. Radulov, M. M. Rajabali, J. Randrup, E. Rapisarda, S. Rothe, K. Sandhu, M. D. Seliverstov, A. M. Sjödin, V. L. Truesdale, C. Van Beveren, P. Van den Bergh, Y. Wakabayashi, and M. Warda.  
*Phys. Rev. C* **90**, 041301 (Oct 2014)

- [8] Erratum: Isotopic yield distributions of transfer- and fusion-induced fission from  $^{238}\text{U} + ^{12}\text{C}$  reactions in inverse kinematics [Phys. Rev. C 88, 024605 (2013)].  
 M. Caamaño, O. Delaune, F. Farget, **X. Derkx**, K.-H. Schmidt, L. Audouin, C.-O. Bacri, G. Barreau, J. Benlliure, E. Casarejos, A. Chbihi, B. Fernández-Domínguez, L. Gaudefroy, C. Golabek, B. Jurado, A. Lemasson, A. Navin, M. Rejmund, T. Roger, A. Shrivastava, and C. Schmitt.  
 Phys. Rev. C **89**, 069903 (Jun 2014)
- [7]  $^{48}\text{Ca} + ^{249}\text{Bk}$  Fusion Reaction Leading to Element  $Z = 117$ : Long-Lived  $\alpha$ -Decaying  $^{270}\text{Db}$  and Discovery of  $^{266}\text{Lr}$ .  
 J. Khuyagbaatar, A. Yakushev, C. E. Düllmann, D. Ackermann, L.-L. Andersson, M. Asai, M. Block, R. A. Boll, H. Brand, D. M. Cox, M. Dasgupta, **X. Derkx**, A. Di Nitto, K. Eberhardt, J. Even, M. Evers, C. Fahlander, U. Forsberg, J. M. Gates, N. Gharibyan, P. Golubev, K. E. Gregorich, J. H. Hamilton, W. Hartmann, R.-D. Herzberg, F. P. Heßberger, D. J. Hinde, J. Hoffmann, R. Hollinger, A. Hübner, E. Jäger, B. Kindler, J. V. Kratz, J. Krier, N. Kurz, M. Laatiaoui, S. Lahiri, R. Lang, B. Lommel, M. Maiti, K. Miernik, S. Minami, A. Mistry, C. Mokry, H. Nitsche, J. P. Omtvedt, G. K. Pang, P. Papadakis, D. Renisch, J. Roberto, D. Rudolph, J. Runke, K. P. Rykaczewski, L. G. Sarmiento, M. Schädel, B. Schausten, A. Semchenkov, D. A. Shaughnessy, P. Steinegger, J. Steiner, E. E. Tereshatov, P. Thörle-Pospiech, K. Tinschert, T. Torres De Heidenreich, N. Trautmann, A. Türler, J. Uusitalo, D. E. Ward, M. Wegrzecki, N. Wiehl, S. M. Van Cleve, and V. Yakusheva.  
 Phys. Rev. Lett. **112**, 172501 (May 2014)
- [6] Transfer reactions in inverse kinematics: An experimental approach for fission investigations.  
 C. Rodríguez-Tajes, F. Farget, **X. Derkx**, M. Caamaño, O. Delaune, K.-H. Schmidt, E. Clément, A. Dijon, A. Heinz, T. Roger, L. Audouin, J. Benlliure, E. Casarejos, D. Cortina, D. Doré, B. Fernández-Domínguez, B. Jacquot, B. Jurado, A. Navin, C. Paradela, D. Ramos, P. Romain, M. D. Salsac, and C. Schmitt.  
 Phys. Rev. C **89**, 024614 (Feb 2014)
- [5] Spectroscopy of Element 115 Decay Chains.  
 D. Rudolph, U. Forsberg, P. Golubev, L. G. Sarmiento, A. Yakushev, L.-L. Andersson, A. Di Nitto, C. E. Düllmann, J. M. Gates, K. E. Gregorich, C. J. Gross, F. P. Heßberger, R.-D. Herzberg, J. Khuyagbaatar, J. V. Kratz, K. Rykaczewski, M. Schädel, S. Åberg, D. Ackermann, M. Block, H. Brand, B. G. Carlsson, D. Cox, **X. Derkx**, K. Eberhardt, J. Even, C. Fahlander, J. Gerl, E. Jäger, B. Kindler, J. Krier, I. Kojouharov, N. Kurz, B. Lommel, A. Mistry, C. Mokry, H. Nitsche, J. P. Omtvedt, P. Papadakis, I. Ragnarsson, J. Runke, H. Schaffner, B. Schausten, P. Thörle-Pospiech, T. Torres, T. Traut, N. Trautmann, A. Türler, A. Ward, D. E. Ward, and N. Wiehl.  
 Phys. Rev. Lett. **111**, 112502 (Sep 2013)
- [4] Isotopic yield distributions of transfer- and fusion-induced fission from  $^{238}\text{U} + ^{12}\text{C}$  reactions in inverse kinematics.  
 M. Caamaño, O. Delaune, F. Farget, **X. Derkx**, K.-H. Schmidt, L. Audouin, C.-O. Bacri, G. Barreau, J. Benlliure, E. Casarejos, A. Chbihi, B. Fernández-Domínguez, L. Gaudefroy, C. Golabek, B. Jurado, A. Lemasson, A. Navin, M. Rejmund, T. Roger, A. Shrivastava, and C. Schmitt.  
 Phys. Rev. C **88**, 024605 (Aug 2013)
- [3] Study of the surrogate-reaction method applied to neutron-induced capture cross sections.  
 G. Boutoux, B. Jurado, V. Méot, O. Roig, L. Mathieu, M. Aïche, G. Barreau, N. Capellan, I. Companis, S. Czajkowski, K.-H. Schmidt, J. Burke, A. Bail, J. Daugas, T. Faul, P. Morel, N. Pillet, C. Théroigne, **X. Derkx**, O. Sérot, I. Matéa, and L. Tassan-Got.  
 Physics Letters B **712**, 319 (2012)
- [2] Search for single sources of ultra high energy cosmic rays on the sky.  
 G. Giacinti, **X. Derkx**, and D. Semikoz.  
 Journal of Cosmology and Astroparticle Physics **2010**, 022 (2010)

- [1] Prompt  $\gamma$ -ray spectroscopy of isotopically identified fission fragments.  
 A. Shrivastava, M. Caamaño, M. Rejmund, A. Navin, F. Rejmund, K. H. Schmidt, A. Lemasson, C. Schmitt, L. Gaudefroy, K. Sieja, L. Audouin, C. O. Bacri, G. Barreau, J. Benlliure, E. Casarejos, **X. Derkx**, B. Fernández-Domínguez, C. Golabek, B. Jurado, T. Roger, and J. Taieb.  
*Phys. Rev. C* **80**, 051305 (Nov 2009)

## Peer-reviewed proceedings

- [2] Selected Spectroscopic Results on Element 115 Decay Chains.  
 D. Rudolph, U. Forsberg, P. Golubev, L. G. Sarmiento, A. Yakushev, L.-L. Andersson, A. Di Nitto, C. E. Düllmann, J. M. Gates, K. E. Gregorich, C. J. Gross, F. P. Heßberger, R.-D. Herzberg, J. Khuyagbaatar, J. V. Kratz, K. Rykaczewski, M. Schädel, S. Åberg, D. Ackermann, M. Block, H. Brand, B. G. Carlsson, D. Cox, **X. Derkx**, K. Eberhardt, J. Even, C. Fahlander, J. Gerl, E. Jäger, B. Kindler, J. Krier, I. Kojouharov, N. Kurz, B. Lommel, A. Mistry, C. Mokry, H. Nitsche, J. P. Omtvedt, P. Papadakis, I. Ragnarsson, J. Runke, H. Schaffner, B. Schausten, P. Thörle-Pospiech, T. Torres, T. Traut, N. Trautmann, A. Türler, A. Ward, D. E. Ward, and N. Wiehl.

*Journal of Radioanalytical and Nuclear Chemistry* **303**, 1185–1190 (2015).

APSORC 13 – 5th Asia-Pacific Symposium on Radiochemistry, 2013, Kanazawa, Japan

- [1] New developments of the in-source spectroscopy method at RILIS/ISOLDE.  
 B. Marsh, B. Andel, A. Andreyev, S. Antalic, D. Atanasov, A. Barzakh, B. Bastin, C. Borgmann, L. Capponi, T. Cocolios, T. D. Goodacre, M. Dehairs, **X. Derkx**, H. D. Witte, D. Fedorov, V. Fedosseev, G. Focker, D. Fink, K. Flanagan, S. Franchoo, L. Ghys, M. Huyse, N. Imai, Z. Kalaninova, U. Köster, S. Kreim, N. Kesteloot, Y. Kudryavtsev, J. Lane, N. Lebesne, V. Liberati, D. Lunney, K. Lynch, V. Manea, P. Molkanov, T. Nicol, D. Pauwels, L. Popescu, D. Radulov, E. Rapisarda, M. Rosenbusch, R. Rossel, S. Rothe, L. Schweikhard, M. Seliverstov, S. Sels, A. Sjödin, V. Truesdale, C. V. Beveren, P. V. Duppen, K. Wendt, F. Wienholtz, R. Wolf, and S. Zemlyanoy.

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## Proceedings

- [18] Fission studies at VAMOS.  
 F. Farget, M. Caamaño, D. Ramos, C. Rodríguez-Tajes, K.-H. Schmidt, L. Audouin, J. Benlliure, E. Casarejos, E. Clément, D. Cortina, O. Delaune, **X. Derkx**, A. Dijon, D. Doré, B. Fernández-Domínguez, L. Gaudefroy, C. Golabek, A. Heinz, B. Jurado, A. Lemasson, C. Paradela, T. Roger, M. Salsac, and C. Schmitt.  
*to be published in EPJ Web of Conference* (Nov 2017).  
 6th Workshop on Nuclear Fission and Spectroscopy of Neutron-Rich Nuclei, Chamrousse, France
- [17] Excitation-energy influence at the scission configuration.  
 D. Ramos, C. Rodríguez-Tajes, M. Caamaño, F. Farget, L. Audouin, J. Benlliure, E. Casarejos, E. Clement, D. Cortina, O. Delaune, **X. Derkx**, A. Dijon, D. Doré, B. Fernández-Domínguez, G. de France, A. Heinz, B. Jacquot, A. Navin, C. Paradela, M. Rejmund, T. Roger, M.-D. Salsac, and C. Schmitt.  
*EPJ Web of Conferences* **146**, 04019 (Sept 2017).  
 ND2016 – International Conference on Nuclear Data for Science and Technology, 2016, Bruges, Belgium
- [16] Dependence of Fission-Fragment Properties On Excitation Energy For Neutron-Rich Actinides.  
 D. Ramos, C. Rodriguez-Tajes, M. Caamano, F. Farget, L. Audouin, J. Benlliure, E. Casarejos,

E. Clément, D. Cortina, O. Delaune, **X. Derkx**, A. Dijon, D. Doré, B. Fernández-Domínguez, G. De France, A. Heinz, B. Jacquot, A. Navin, C. Paradela, M. Rejmund, T. Roger, M. Salsac, and C. Schmitt.

EPJ Web of Conferences **111**, 10001 (March 2016).

WONDER 2015 – Fourth International Workshop on Nuclear Data Evaluation for Reactor Applications, 2015, Aix-en-Provence, France

- [15] Fission Yields of Minor Actinides at Low Energy Through Multi-nucleon Transfer Reactions of  $^{238}\text{U}$  on  $^{12}\text{C}$ .  
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- [12] ANDES Measurements for Advanced Reactor Systems.  
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- [11] Complete isotopic distributions of fragments produced in transfer- and fusion-induced reactions.  
O. Delaune, M. Caamaño, F. Farget, O. Tarasov, **X. Derkx**, K.-H. Schmidt, L. Audouin, A. Amthor, C.-O. Bacri, G. Barreau, B. Bastin, D. Bazin, J. Benlliure, B. Blank, L. Cacères, E. Casarejos, B. Fernández-Domínguez, L. Gaudefroy, C. Golabek, S. Grévy, B. Jurado, O. Kamalou, A. Lemasson, S. Lukyanov, W. Mittig, D. Morrissey, A. Navin, J. Pereira, L. Perrot,

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 Fission 2013 – Fifth International Workshop on Nuclear Fission and Fission-Product Spectroscopy, 2013, Caen, France

- [10] Isotopic Distributions of Fission Fragments from Transfer-induced Fission.  
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- [9] Isotopic fission fragment distributions as a deep probe to fusion-fission dynamics.  
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 13th International Conference on Nuclear Reaction Mechanisms, 2012, Varenna, Italy
- [7] Neutron-induced cross sections of short-lived nuclei via the surrogate reaction method.  
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- [6] Evolution of isotopic fission-fragment yields with excitation energy.  
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*EPJ Web of Conferences* **31**, 00025 (2012).  
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- [5] Neutron-induced cross sections of short-lived nuclei via the surrogate reaction method.  
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*EPJ Web of Conferences* **17**, 06005 (2011).  
 5th International Conference FUSION11, 2011, Saint Malo, France
- [4] Neutron-induced Capture Cross Sections via the Surrogate Reaction Method.  
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*Journal of the Korean Physical Society* **59**, 1924 (2011).  
 ND2010 – International Conference on Nuclear Data for Science and Technology, 2010, Jeju Island, Republic of Korea
- [3] Neutron-induced capture cross sections via the surrogate reaction method.  
 M. Aïche, G. Boutoux, B. Jurado, G. Barreau, N. Capellan, I. Companis, S. Czajkowski, D. Dassié, B. Haas, L. Mathieu, A. Bail, E. Bauge, J. Daugas, T. Faul, L. Gaudefroy, V. Méot, P. Morel, N. Pillet, O. Roig, J. Taieb, C. Théroine, O. Sérot, F. Gunsing, J. Burke, **X. Derkx**, and L. Tassan-Got.  
*EPJ Web of Conferences* **8**, 07001 (2010).  
 EFNUDAT – Measurements and Models of Nuclear Reactions, 2010, Paris, France
- [2] Minor actinide fission induced by multi-nucleon transfer reaction in inverse kinematics.  
**X. Derkx**, F. Rejmund, M. Caamaño, K.-H. Schmidt, L. Audouin, C.-O. Bacri, G. Barreau, J. Benlliure, E. Casarejos, B. Fernández-Domínguez, L. Gaudefroy, C. Golabek, B. Jurado, A. Lemasson, A. Navin, M. Rejmund, T. Roger, A. Shrivastava, C. Schmitt, and J. Taieb.  
*EPJ Web of Conferences* **2**, 07001 (2010).  
 CNR\*09 – Second International Workshop on Compound Nuclear Reactions and Related Topics, 2009, Bordeaux, France
- [1] Isotopic Resolution of Fission Fragments from  $^{238}\text{U} + ^{12}\text{C}$  Transfer and Fusion Reactions.  
 M. Caamaño, F. Rejmund, **X. Derkx**, K.-H. Schmidt, L. Andouin, C.-O. Bacri, G. Barreau, J. Benlliure, E. Casarejos, B. Fernández-Domínguez, L. Gaudefroy, C. Golabek, B. Jurado, A. Lemasson, A. Navin, M. Rejmund, T. Roger, A. Shrivastava, C. Schmitt, and J. Taieb.  
*AIP Conference Proceedings* **1175**, 15 (2009).  
 Fission 2009 – 4th International Workshop on Nuclear Fission and Fission-Product Spectroscopy, 2009, Saint-Paul-lès-Durance, France

## Conferences, workshops and seminars

- [12] **X. Derkx**, Superheavy element research at the gas-filled recoil separator TASCA at GSI – 6th International Conference FUSION14 – New Delhi, India (Feb 2014), *Invited talk*
- [11] **X. Derkx**, Transfer products from  $^{50}\text{Ti} + ^{249}\text{Cf}$  at 306 MeV – TASCA Collaboration Meeting – Darmstadt, Germany (Oct 2013)
- [10] **X. Derkx**, Actinide fission induced by multi-nucleon transfer reactions in inverse kinematics – Seminar für Kern- und Radiochemie – Mainz, Germany (Nov 2012)
- [9] **X. Derkx**, Actinide fission induced by multi-nucleon transfer reaction in inverse kinematics at GANIL (poster) – IOP Nuclear Physics Conference – Brighton, UK (April 2012), *Award for the best poster*

- [8] **X. Derkx**, Minor actinide fission induced by multi-nucleon transfer reaction in inverse kinematics – 5th ASRC International Workshop ”Perspectives in Nuclear Fission” – Tokai, Japan (March 2012)
- [7] **X. Derkx**, Minor actinide fission induced by multi-nucleon transfer reaction in inverse kinematics – JYFL seminar – Jyväskylä, Finland (Oct 2011)
- [6] **X. Derkx**, Status and plans of measurements at GANIL – Accurate Nuclear Data for Nuclear Energy Sustainability (ANDES) First Annual Meeting – Madrid, Spain (April 2011)
- [5] **X. Derkx**, Mesures des rendements isotopiques des fragments de fission induite par réactions de transfert multinucléon en cinématique inverse – Atelier GEDEPEON (CEA/CNRS/EDF/AREVA-NP) – Paris, France (Jan 2011)
- [4] **X. Derkx**, Transferts multinucléons et cinématique inverse pour l’étude de la fission des actinides – Journées de réflexion CNRS/IN2P3 “Les applications sociétales de la Physique Nucléaire : Energie et Santé” – St François, Guadeloupe, France (Dec 2010), *Invited talk*
- [3] **X. Derkx**, Transfer induced fission in inverse kinematics – CNR\*09 – 2nd International Workshop on Compound Nuclear Reactions – Bordeaux, France (Sept 2009)
- [2] **X. Derkx**, Isotopic production rate in minor actinide fission (poster) – EURORIB’08 – Giens, France (Jun 2008)
- [1] **X. Derkx**, Workshop on Future prospects of Ultra-High Energy Cosmic Rays – Paris, France (May 2007), *Local organizing committee*