

Estremi del bando di selezione	D.R. n.159 del 18.11.2016 SSD:FIS/05 Sett: 02/C1 Resp. Scientifico: prof. Luciano Burderi
Informazioni aggiornate al	04/07/2017
Nome e Cognome	Andrea Sanna
Data di nascita	18/05/1983

Si raccomanda di indicare con precisione tutti gli elementi valutabili ai sensi del bando di selezione (aggiungere o togliere righe secondo necessità).

Esperienza professionale

Periodo	Ente	Principali attività e responsabilità
05/2013 - oggi	Universita' degli Studi di Cagliari	Assegnista di ricerca

Istruzione, formazione (es. titoli di studio, certificazioni professionali/linguistiche/informatiche)

Data	Titolo / Principali tematiche	Ente
02/2013	PhD Astronomia e Astrofisica	Universita' di Groningen (NL)
02/2008	Laurea Magistrale in Fisica	Universita' degli Studi di Cagliari
09/2005	Laurea Triennale in Fisica	Universita' degli Studi di Cagliari

Pubblicazioni con referee

35: Sanna A., Di Salvo T., Burderi L., Riggio A., Pintore F., Gambino A., Iaria R., Tailo M., Scarano F., Papitto A., "On the timing properties of SAX J1808.4-3658 during its 2015 outburst", 2017, MNRAS, stx1588

<http://adsabs.harvard.edu/abs/2017arXiv170606554S>

34: Sanna A., Riggio A., Burderi L., Pintore F., Di Salvo T., D'Ai' A., Bozzo E., Esposito P., Segreto A., Scarano F., Gambino A., "Study of the accretion torque during the 2014 outburst of the X-ray pulsar GRO J1744-28", 2017, MNRAS, vol. 469, issue 1, pp. 2-12

<http://adsabs.harvard.edu/abs/2017MNRAS.469....2S>

33: Motta S., Ruoco-Escorial A., Kuulkers E., Munoz-Darias T., **Sanna A.**, “*Links between quasi-periodic oscillations and accretion states in neutron star low-mass X-ray binaries*”, 2017, MNRAS, Volume 468, Issue 2, p.2311-2324

<http://adsabs.harvard.edu/abs/2017MNRAS.468.2311M>

32: Ferrigno C., Bozzo E., **Sanna A.**, Pintore F., Papitto A., Riggio A., Burderi L., Di Salvo T., Iaria R., D’Ai’ A., “*Discovery of a soft X-ray 8 mHz QPO from the accreting millisecond pulsar IGR J00291+5934*”, 2017, MNRAS, Volume 466, Issue 3, p.3450-3459

<http://adsabs.harvard.edu/abs/2017MNRAS.466.3450F>

31: **Sanna A.**, Pintore F., Bozzo E., Ferrigno C., Papitto A., Riggio A., Di Salvo T., Iaria R., D’Ai’ A., Egron E., Burderi L., “*Spectral and timing properties of IGR J00291+5934 during its 2015 outburst*”, 2017, MNRAS, Volume 466, Issue 3, p.2910-2917

<http://adsabs.harvard.edu/abs/2017MNRAS.466.2910S>

30: Zhang G., Mendez M., **Sanna A.**, Ribeiro E., Gelfand J., “*Relation between spectral changes and the presence of the lower kHz QPO in the neutron star low-mass X-ray binary 4U 1636-53*”, 2017, MNRAS, Volume 465, Issue 4, p. 5003-5010

<http://adsabs.harvard.edu/abs/2017MNRAS.465.5003Z>

29: Matranga M., Di Salvo T., Iaria R., Gambino A., Burderi L., Riggio A., **Sanna A.**, “*A re-analysis of the NuSTAR and XMM-Newton broad-band spectrum of Serpens X-1*”, 2017, A&A, Volume 600, id.A24, 13

<http://adsabs.harvard.edu/abs/2017A%26A...600A..24M>

28: **Sanna A.**, Papitto A., Burderi L., Bozzo E., Riggio A., Di Salvo T., Ferrigno C., Rea N., Iaria R., “*Discovery of a new accreting millisecond X-ray pulsar in the globular cluster NGC 2808*”, 2017, A&A, Volume 598, id.A34, 7

<http://adsabs.harvard.edu/abs/2017A%26A...598A..34S>

27: D’Ai’A., Burderi L., Di Salvo T., Iaria R., Pintore F., Riggio A., **Sanna A.**, “*Discovery of hard phase lags in the pulsed emission of GRO J1744-28*”, 2016, MNRAS, Letters, Volume 463, Issue 1, p.L84-L88

<http://adsabs.harvard.edu/abs/2016MNRAS.463L..84D>

26: Iaria R., Di Salvo T., Del Santo M., Pintore F., **Sanna A.**, Papitto A., Burderi L., Riggio A., Gambino A., Matranga M., “*Study of the reflection spectrum of the LMXB 4U 1702-429*”, 2016, A&A, Volume 596, id.A21, 9

<http://adsabs.harvard.edu/abs/2016A%26A...596A..21I>

25: de Avellar M., Mendez M., Altamirano D., **Sanna A.**, Zhang G., “*Phase lags of quasi-periodic oscillations across source states in the low- mass X-ray binary 4U 1636-53*”, 2016 MNRAS, 201, Volume 461, Issue 1, p.79-92

<http://adsabs.harvard.edu/abs/2016MNRAS.461...79D>

24: Feroci M., Bozzo E.,, **Sanna A.**, “*The LOFT mission concept: a status update*”, Proceedings of the SPIE, 2016, Volume 9905, id. 99051R 20 pp. (2016)

<http://adsabs.harvard.edu/abs/2016SPIE.9905E..1RF>

23: Tetarenko A. J., Bahramian A., Sivako G. R., Tremou E., Linares M., Tudor V., Miller-Jones J. C. A., Heinke C. O., Chomiuk L., Strader J., Altamirano D., Degenaar N., Maccarone T., Patruno A., **Sanna A.**, Wijnands R., “*Disc-jet coupling in the Terzan 5 neutron star in X-ray binary EXO 1745-248*”, 2016, MNRAS, 460, 345T

<http://adsabs.harvard.edu/abs/2016MNRAS.460..345T>

22: **Sanna A.**, Burderi L., Riggio A., Pintore F., Di Salvo T., Gambino A. F., Iaria R., Matranga M., Scarano F., “*Timing of the accreting millisecond pulsar SAX J1748.9-2021*”

during its 2015 outburst, 2016, MNRAS, 459, 1340S
<http://adsabs.harvard.edu/abs/2016MNRAS.459.1340S>

21: de Avellar M. G. B., Mendez M., Altamirano D., **Sanna A.**, Zhang G., *Phase lags of quasi-periodic oscillations across source states in low mass X-ray binary 4U 1636-53*, 2016, MNRAS, 461, 79D
<http://adsabs.harvard.edu/abs/2016MNRAS.461...79D>

20: Pintore F., **Sanna A.**, Di Salvo T., Del Santo M., Riggio A., D'Ai A., Burderi L., Iaria R., *Broad-band spectral analysis of the accreting millisecond X-ray pulsar SAX J1748.9-2021*, 2016, MNRAS, 457, 2988P
<http://adsabs.harvard.edu/abs/2016MNRAS.457.2988P>

19: Gambino A. F., Iaria R., Di Salvo T., Del Santo M., Burderi L., Matranga M., Pintore F., Riggio A., **Sanna A.**, *New orbital ephemeris fro the dipping source 4U 1323-619: constraining the distance to the source*, 2016, A&A, 589A, 34G <http://adsabs.harvard.edu/abs/2016A%26A...589A..34G>

18: de Ona Wilhelmi E., Papitto A., Li J., Rea N., Torres D., Burderi L., Di Salvo T., Iaria R., Riggio A., **Sanna A.**, *SAX J1808.4-3658, an accreting millisecond pulsar in gamma rays?*, 2016, MNRAS, 456, 2647D
<http://adsabs.harvard.edu/abs/2016MNRAS.456.2647D>

17: Iaria R., Di Salvo T., Gambino A. F., Del Santo M., Romano P., Matranga M., Galiano C.G., Scarano F., Riggio A., **Sanna A.**, Pintore F., Burderi L., *Signature of the presence of a third body orbiting around XB 1916-053*, 2015, A&A, 582A, 32I <http://adsabs.harvard.edu/abs/2015A%26A...582A..32I>

16: D'Ai A., Di Salvo T., Iaria R., Garcia J., **Sanna A.**, Pintore F., Riggio A., Burderi L., Bozzo E., Dauser T., Matranga M., Galiano C. G., Robba N. R., *GRO J1728-44: an intermediate B-field in a low-mass X-ray binary*, 2015, MNRAS, 449, 4288D <http://adsabs.harvard.edu/abs/2015MNRAS.449.4288D>

15: Pintore F., Di Salvo T., Bozzo E., **Sanna A.**, Burderi L., D'Ai A., Riggio A., Scarano F., Iaria R., *Study of the reflection spectrum of the accreting neutron star GX 3+1 using XMM-Newton and INTEGRAL*, 2015, MNRAS, 450, 2016P
<http://adsabs.harvard.edu/abs/2015MNRAS.450.2016P>

14: Iaria R., Di Salvo T., Matranga M., Galiano C., D'Ai A., Riggio A., Burderi L., **Sanna A.**, Ferrigno C., Del Santo M., Pintore F., Robba N.R., *A possible cyclotron resonance scattering feature near 0.7 keV in X1822-371*, 2015, A&A, 577A <http://adsabs.harvard.edu/abs/2015A%26A...577A..63I>

- 13:** Motta S.E., Casella P., Munoz-Daria T., Henze M., **Sanna A.**, Fender R., Belloni T., *Geometrical constraints on the origin of the timing signals from black holes*, 2014, MNRAS, 447 <http://adsabs.harvard.edu/abs/2015MNRAS.447.2059M>
- 12:** Pintore F., **Sanna A.**, di Salvo T., Guinazzi M., D'Ai A., Riggio A., Burderi L., Iaria R., Robba N.R., *Testing Rate Dependent corrections on timing mode EPIC-pn spectra of the accreting Neutron Star GX 13+1*, 2014, MNRAS, 445 <http://adsabs.harvard.edu/abs/2014MNRAS.445.3745P>
- 11:** Motta S.E., Munoz-Daria T., **Sanna A.**, Fender R., Belloni T., Stella L., *Black hole spin measurements through the relativistic precession model: XTE J1550-564*, 2014, MNRAS, 439 <http://adsabs.harvard.edu/abs/2014MNRAS.439L..65M>
- 10:** Feroci M., the LOFT consortium (including **Sanna A.**), *The large Observatory for X-ray timing*, 2014, SPIE, 9144E, 2TF <http://adsabs.harvard.edu/abs/2014SPIE.9144E..2TF>
- 9:** Lyu, M., Mendez M., **Sanna A.**, Homan J., Belloni T., Hiemstra B., *Iron-line and continuum variations in the XMM-Newton and Suzaku spectra of the neutron-star low-mass X-ray binary 4U 1636-53*, 2014, MNRAS, 1165L <http://adsabs.harvard.edu/abs/2014MNRAS.440.1165L>
- 8:** **Sanna A.**, Mendez M., Altamirano D., Belloni T., Hiemstra B. and Linares M., *Broad iron emission line and kilohertz quasi-periodic oscillations in the neutron-star system 4U 1636-53*, 2014, MNRAS, 440, 3275S <http://adsabs.harvard.edu/abs/2014MNRAS.440.3275S>
- 7:** Mendez M., Altamirano D., Belloni T., **Sanna A.**, *The phase lags of high-frequency quasi-periodic oscillations in four black hole candidates*, 2013, MNRAS, 435, 2132M <http://adsabs.harvard.edu/abs/2013MNRAS.435.2132M>
- 6:** de Avelar M., Mendez M., **Sanna A.**, Horvath J., *Time lags of the kilohertz quasi-periodic oscillations in the low-mass X-ray binaries 4U 1608-52 and 4U 1636-53*, 2013, MNRAS, 1632 <http://adsabs.harvard.edu/abs/2013MNRAS.433.3453D>
- 5:** **Sanna A.**, Hiemstra B., Mendez M., Altamirano D., Belloni T. and Linares M., *Broad iron line in the fast spinning neutron-star system 4U 1636-53*, 2013, MNRAS, 432, 1144 <http://adsabs.harvard.edu/abs/2013MNRAS.432.1144S>
- 4:** Feroci M., the LOFT consortium (including **Sanna A.**), *The large Observatory for X-ray timing*, 2012, SPIE, 8443E, 2DF <http://adsabs.harvard.edu/abs/2012SPIE.8443E..2DF>
- 3:** Belloni T, **Sanna A.** and Mendez M., *High-frequency quasi-periodic oscillations in black hole binaries*, 2012, MNRAS, 426, 1701 <http://adsabs.harvard.edu/abs/2012MNRAS.426.1701B>

2: Sanna A., Mendez M., Belloni T. and Altamirano D., *The time derivative of the kilohertz quasi-periodic oscillations in 4U 1636-53*, 2012, MNRAS, 424, 2936 <http://adsabs.harvard.edu/abs/2012MNRAS.424.2936S>

1: Sanna A., Mendez M., Altamirano D., Homan J., Casella P., Belloni T., van der Klis M. and Wijnands R., *The kilohertz quasi-periodic oscillations during the Z and atoll phases of the unique transient XTE J1701-462*, 2011, MNRAS, 408, 622 <http://adsabs.harvard.edu/abs/2010MNRAS.408..622S>

Publicazioni senza referee

24: Iaria R., Gambino A., Di Salvo T., Burderi L., Matranga M., Riggio A., Sanna A., Scarano F., D'Ai' A., "A possible solution of the puzzling variation of the orbital period of MXB 1659-298", 2017, eprint arXiv:1703.05294, <http://adsabs.harvard.edu/abs/2017arXiv170305294I>

23: Sanna A., D'Ai' A., Bozzo E., Riggio A., Pintore F., Burderi L., Di Salvo T., Iaria R., "Swift-XRT confirms the renewed X-ray activity of the Bursting Pulsar GRO J1744-28", 2017, Atel 10079, <http://adsabs.harvard.edu/abs/2017ATel10079....1S>

22: Burgay M., Possenti A., Sanna A., Papitto A., Burderi L., Bozzo E., Riggio A., Di Salvo T., Ferrigno C., Rea N., "Parkes upper limit on pulsed radio emission from MAXI J0911-655 at 20-cm", 2016, Atel 9740, <http://adsabs.harvard.edu/abs/2016ATel.9740....1B>

21: Sanna A., Motta S., "Swift-XRT detected a new outburst of Cir X-1", 2016, Atel 9547, <http://adsabs.harvard.edu/abs/2016ATel.9547....1S>

20: Sanna A., Riggio A., Pintore F., Altamirano D., Burderi L., Di Salvo, T., "SWIFT/XRT confirms the new outburst from Aql X-1", 2016, Atel 9292, <http://adsabs.harvard.edu/abs/2016ATel.9292....1S>

19: Sanna A., Riggio A., Pintore F., Altamirano D., Burderi L., Di Salvo, T., "SWIFT/BAT possible detection of a new outburst from Aql X-1", 2016, Atel, 9287, <http://adsabs.harvard.edu/abs/2016ATel.9287....1S>

18: Bozzo E., Ferrigno C., Papitto A., Sanna A., Burderi L., Rea N., Di Salvo T., *INTEGRAL observation of MAXI J0911-655*, 2016, Atel, 8986 <http://adsabs.harvard.edu/abs/2016ATel.8986....1B>

17: Bozzo E., Papitto A., **Sanna A.**, Falanga M., Campana S., Di Salvo T., Iaria R., Riggio A., Egron E., *The first thermonuclear X-ray burst from IGR J00291+5934*, 2015, Atel, 7852 <http://adsabs.harvard.edu/abs/2015ATel.7852....1B>

16: **Sanna A.**, Pintore F., Riggio A., Burderi L., Di Salvo T., Iaria R., Scarano F., Bozzo E., *Swift detected a renewed X-ray activity in IGR J00291+5934*, 2015, Atel, 7836 <http://adsabs.harvard.edu/abs/2015ATel.7836....1S>

15: Neilsen J., Motta S. E., Coriat M., Fender R., Ponti G., Corbel S., **Sanna A.**, *X-ray spectroscopy of H1743-322 in outburst*, 2015, Atel, 7652 <http://adsabs.harvard.edu/abs/2015ATel.7652....1N>

14: Motta S. E., **Sanna A.**, Altamirano D., Rushton A., Fender R., 2015, Atel, 7591 <http://adsabs.harvard.edu/abs/2015ATel.7591....1M>

13: **Sanna A.**, Pintore F., Riggio A., D'Ai A., Di Salvo T., Burderi L., Iaria R., Scarano F., Segreto A., *Swift/XRT confirmed the new outburst of SAX J1808.4-3658*, 2015, Atel, 7371 <http://adsabs.harvard.edu/abs/2015ATel.7371....1S>

12: **Sanna A.**, Riggio A., Pintore F., D'Ai A., Di Salvo T., Burderi L., Iaria R., Scarano F., Segreto A., *Swift/BAT detected a possible new outburst of the X-ray transient SAX J1808.4-3658*, 2015, Atel, 7364 <http://adsabs.harvard.edu/abs/2015ATel.7364....1S>

11: Rushton A., Rumsey C., Motta S. E., Anderson G., Fender R., **Sanna A.**, Altamirano D., Jonker P., *Radio non-detection of XTE J1856+053*, 2015, Atel, 7338 <http://adsabs.harvard.edu/abs/2015ATel.7338....1R>

10: **Sanna A.**, Altamirano D., Rushton A., Jonker P., *Swift XRT confirms the new outburst of the X-ray transient XTE J1856+053*, 2015, Atel, 7278 <http://adsabs.harvard.edu/abs/2015ATel.7278....1S>

9: Tremou E., Sivako G., Baharamian A., Heinke C., Tetarenko A., Wijnands R., Degenaar N., Linares M., Miller-Jones J., Patruno A., Chomiuk L., Strader J., Altamirano D., Maccarone T., **Sanna A.**, *VLA observations identify the currently active source in the Terzan 5 as the neutron star transient EXO 1745-248*, 2015, Atel, 7262 <http://adsabs.harvard.edu/abs/2015ATel.7262....1T>

8: Linares M., Chakrabarty D., Marshall H., Baharamian A., Heinke C., Sivako G., Patruno A., Altamirano D., Wijnands R., Degenaar N., **Sanna A.**, *Swift refined location points to the neutron star transient EXO 1745-248 as the source currently active in Terzan 5*, 2015, Atel, 7247

<http://adsabs.harvard.edu/abs/2015ATel.7247....1L>

- 7: Bahramian A., Altamirano D., Heinke C., Sivako G., Linares M., Patruno A., Wijnands R., Degenaar N., **Sanna A.**, *Swift/XRT follow up of the X-ray transient in the globular cluster Terzan 5*, 2015, Atel, 7242
<http://adsabs.harvard.edu/abs/2015ATel.7242....1B>
- 6: **Sanna A.**, Pintore F., D’Aì A., Riggio A., Burderi L., Di Salvo T., Iaria R., Scarano F., *AGLJ2251+6454: Swift non-detection of any X-ray counterpart*, 2015, Atel, 7231 <http://adsabs.harvard.edu/abs/2015ATel.7231....1S>
- 5: **Sanna A.**, Pintore F., Riggio A., Burderi L., Di Salvo T., D’Aì A., Iaria R., Robba N. R., *Phase shift during an X-ray burst in GRO J1744-28*, 2014, Atel, 5910 <http://adsabs.harvard.edu/abs/2014ATel.5910....1S>
- 4: Pintore F., **Sanna A.**, Riggio A., Burderi L., Di Salvo T., D’Aì A., Iaria R., Robba N. R., *Detection of a spin derivative un GRO J1744-28 with Swift/XRT*, 2014, Atel, 5901 <http://adsabs.harvard.edu/abs/2014ATel.5901....1P>
- 3: D’Aì A., Di Salvo T., Iaria R., Riggio A., Burderi L., **Sanna A.**, Pintore F., *GRO J1744-28 active as X-ray pulsar*, 2014, Atel, 5858
<http://adsabs.harvard.edu/abs/2014ATel.5858....1D>
- 2: Riggio A., Burderi L., Di Salvo T., D’Aì A., Papitto A., Iaria R., Robba N., **Sanna A.**, Bozzo E., Ferrigno C., Rea N., Pavan L., *Coherent pulsations and burst oscillations in millisecond pulsar IGR J18245-2452/PSR J1824-2452I in M28*, 2013, Atel, 5086 <http://adsabs.harvard.edu/abs/2013ATel.5086....1R>
- 1: Papitto A., Burderi L., D’Aì A., Di Salvo T., Motta S. E., Belloni T., **Sanna A.**, Riggio A., *A preliminary orbital solution for the transient eclipsing pulsar in Terzan 5*, 2010, Atel 2939
<http://adsabs.harvard.edu/abs/2010ATel.2939....1P>

Convegni

- “EWASS 2017 - Properties and evolution of accreting compact objects in low and high mass X-ray binaries”, Prague, Czech Republic, June 2017
- ‘ISSI TEAM MEETING: *The Disk-Magnetosphere Interaction Around Transitional Millisecond Pulsars*’, Bern, Switzerland, 23-27 01/2017
- ‘ISSI TEAM MEETING: *There it Spins: the Hunt for Black Hole Spins*’, Bern, Switzerland, 6-9 02/2017
- “EWASS 2016 – Exploring pulsar formation, evolution and magnetic field: from low mass X-ray binaries to magnetars”, Athens, Greece, July 2015

- ‘ISSI TEAM MEETING’, Bern, Switzerland, September 2015
- “The Unquiet Universe”, Cefalù, Italy, June 2014
- "CNOG 2013", Ferrara, Italy, September 2013
- "Advance Research Workshop on X-ray Timing", Pune, India, January 2012
- “Nova School”, Dwingeloo, The Netherlands, November 2011
- “The X-ray Universe”, Berlin, Germany, June 2011
- ‘Monday Lunch Talk’, Kapteyn Institute, Groningen, The Netherlands, May 2011
- ‘ISSI TEAM MEETING’, Bern, Switzerland, March 2011
- “Fast X-ray timing and spectroscopy at extreme count rates”, Champéry, Switzerland, February 2011
- “High energy view of accreting objects”, Crete, Greece, November 2010
- “Cospar - 38th Scientific Assembly”, Bremen, Germany, July 2010
- “Black Hole variability workshop”, Southampton, UK, May 2010
- “NW3 Science Meeting”, Amsterdam, The Netherlands, June 2009

Altre attività scientifiche

Referee per riviste scientifiche:

- The Astrophysical Journal and The Astrophysical Journal Letters
- Advances in Space Research

Referee per proposal osservativi:

- AstroSat

Insegnamento:

- Lezione (1 ora) and tutoraggio (15 ore) presso ‘Advance Research Workshop on X-ray Timing’, Pune, India, 2012

- Lezioni (12 ore) di Mezzo Interstellare all'interno del corso di Fondamenti di Astronomia e Astrofisica, Dipartimento di Fisica, Università' di Cagliari, 2015
- Lezioni (12 ore) di Mezzo Interstellare all'interno del corso di Fondamenti di Astronomia e Astrofisica, Dipartimento di Fisica, Università' di Cagliari, 2017

Supervisore studenti:

- Corelatore tesi triennale dello studente Mathijs van der Mast, Università' di Groningen, 2012
- Corelatore tesi specialistiche di Fabiana Scarano e Ignazio Serra, Università' di Cagliari, 2013–2014
- Corelatore tesi triennale di Enrico Monstallino e Gaia Aru, Università' di Cagliari, 2015-2016
- Corelatore tesi triennale di Andrea Tronci ed Eleonora Puzzone, Università' di Cagliari, 2017
- Corelatore tesi specialistiche di Matteo Fratta, Università' di Cagliari, 2017

Monserrato, 04/07/2017