

---

## RACHEL BEZANSON

Department of Physics and Astronomy  
University of Pittsburgh  
3941 O'Hara St  
Pittsburgh PA 15260

office: +1 (412)-624-9013  
rachel.bezanson@pitt.edu  
(US Citizen)

---

observational galaxy formation and evolution through cosmic time

---

### EDUCATION

**Yale University**, New Haven, Connecticut 2007-2013

M.Phil., M.S., Ph.D. - Astronomy

Thesis Title: *Ten Billion Years of Growth: Massive Galaxy Evolution from Structures and Dynamics*

Advisor: Dr. Pieter van Dokkum

**Barnard College, Columbia University**, New York, New York 1999-2003

B.A. - Astrophysics

*summa cum laude, Phi Beta Kappa, Dean's List all years*

*Department Honors & Distinction on Senior Research Requirement*

---

### EMPLOYMENT

**Assistant Professor**, University of Pittsburgh, Pittsburgh, PA 2017-present

**H.N. Russell Fellow**, Princeton University, Princeton, NJ 2016-2017

**Hubble Fellow, Steward Observatory**, Tucson, AZ 2013-2016

---

### FELLOWSHIPS AND AWARDS

**H.N. Russell Fellowship**, Department of Astrophysics, Princeton University, 2016-2017

**Dirk Brouwer Memorial Prize**, <https://astronomy.yale.edu/prizes>, Yale University, 2016

**Hubble Fellowship**, Steward Observatory, University of Arizona, 2013-2016

**summa cum laude**, Barnard College, Columbia University, 2003

**Phi Beta Kappa**, Barnard College, Columbia University, 2003

**Howard Hughes Grant for Undergraduate Research**, with Elena Aprile, Columbia, NY 2001

---

### CONFERENCES AND TALKS

- Harvard ITC, Battlestar Galactica Seminar, *Invited Talk*, April 2019
- AAS: US-ELT Key Science Program, *Invited Talk*, January 2019
- CWRU Astronomy Colloquium, *Invited Talk*, November 2018
- CIERA Seminar, *Invited Talk*, October 2018
- Tufts Colloquium, *Invited Talk*, September 2018
- WFIRST/LSST Workshop, *Invited Talk*, August 2018
- Galaxy Scaling Relations Conference, Kingston, *Invited Review*, July 2018
- Caltech Astronomy Colloquium, *Invited Talk*, March 2018
- Princeton Galread Seminar, March 2018
- Case Western Reserve Physics Seminar, *Invited talk*, October 2017
- Princeton Dept. of Astrophysics Advisory Council Meeting, *Invited talk*, May 2017
- U Illinois - UC Colloquium, *Invited talk*, Illinois, February 2017
- Princeton/IAS Colloquium, *Invited talk*, February 2017
- HSC Seminar, Princeton, September 2016
- CIERA Fellows at the Frontiers, *Invited talk*, September 2016
- Galread Seminar, Princeton, September 2016

- Deconstructing Galaxies at Cosmic Noon Workshop, Lorentz Center, *Invited Review/discussion*, July 2016
- Massive Beasts of the Cosmos Conference, Kruger Park, contributed talk, July 2016
- What Shapes Galaxies? Conference, STScI, contributed talk, April 2016
- UMass-Amherst Colloquium, *Invited talk*, April 2016
- PITTPAC LSST Photo-z Workshop, contributed talk, April 2016
- Hubble Fellow Symposium, contributed talk, March 2016
- 3D-HST conference, *Invited talk*, November 2015
- UC-San Diego CASS Seminar, *Invited talk*, October 2015
- Steward Observatory/NOAO colloquium, *Invited talk*, April 2015
- Hubble Fellow Symposium, contributed talk, March 2015
- The Most Massive Galaxies and Their Precursors, contributed talk, February 2015
- Astronomy Colloquium, University of Washington, *Invited talk*, October 2014
- Open University Seminar, Milton Keynes, UK, October 2014
- Galaxy Masses as Constraints of Formation Models, Oxford, contributed talk, July 2014
- Hubble Fellow Symposium, contributed talk, March 2014
- Unveiling the Formation of Massive Galaxies, Aspen, contributed talk, February 2014
- Extragalactic Seminar, UT-Austin, October 2013
- Bash Symposium, UT-Austin, *Invited talk*, October 2013
- Astronomy Seminar, Texas A&M, *Invited talk*, September 2013
- NOAO FLASH Talk, NOAO, September 2013
- Dissertation Talk, AAS-Long Beach, September 2013
- OIR Seminar, CfA, December 2012
- Journal Club Talk, U.C.L.A., October 2012
- Caltech Tea Talk, California Institute of Technology, October 2012
- FLASH talk, U.C.-Santa Cruz, October 2012
- Berkeley Cosmology Seminar and Galform Talks, *Invited talk*, U.C.-Berkeley, October 2012
- IAU Intriguing Lives of Massive Galaxies Session, Beijing, poster presentation, August 2012
- Galaxies Insight-Out Conference, Leiden, *Invited talk*, July 2012
- Galaxy Formation Conference, Durham, poster presentation, July 2011
- Deep IR studies of the Distant Universe Meeting, Leiden, contributed talk, February 2009
- Evolution of Galaxies from Mass-Selected Samples, Leiden, contributed talk, November 2009

---

## ADDITIONAL EXPERIENCE

### *Observing*

- HST – WFC3:** 13 orbit imaging program (Proposal #12167)
- VLT – VIMOS:** many nights observing for LEGA-C survey (total allocation: ~128 nights)
- VLA:** 30 hours in 2015B (PI J. Spilker, graduate student at UA)
- ALMA:** (as PI:) Cycle 3: 2.7 hours, Cycle 4: 7.7 hours, Cycle 5: 27.8 hours
- Gemini - GMOS N/S:** (as PI:) ~ 30 hours
- MMT – Hectospec:** 9 nights, **MMIRS:** 2 nights, **Red Channel Spectrograph:** 3 nights (all PI)
- Keck – LRIS:** 8 nights, **DEIMOS:** 3 nights
- Blanco 4.0 meter:** 15 nights imaging with NEWFIRM medium band NIR filters
- SMARTS – Yale 1.0 m:** 8 nights imaging

### **Surveys and Large Collaborations:**

- Newfirm Medium Band Survey (NMBS) and NMBSII*
- 3DHST - Spectroscopic Galaxy Evolution Survey with HST*
- CHOMP (Colorblind Observations of Massive Progenitors) survey, PI*
- LEGA-C (Large Early Galaxy Astrophysics Census), Survey Scientist, <http://www.mpia.de/home/legac/>*
- SQUIGGLE survey, Co-I, <http://squiggle.astro.berkeley.edu/>*
- Prime Focus Spectrograph (PFS) - SSP team member, Northeast Participation Group, Treasurer*

**Computing:** experience with C, IDL, IRAF, Python

### **Service:**

- Faculty Hiring Committees at Pitt (2017/2018)
- Allegheny Observatory, Diversity Committees
- AURA representative for the University of Pittsburgh (2018+)

---

Postdoctoral mentor and organizer for Princeton Post-baccalaureate Program (2017-2018)  
Referee for MNRAS, ApJ, and ApJL  
Referee for NPP and NESSF proposals  
NSF Panel (2019)  
ALMA Time Allocation Committee (2016, 2017, 2018)  
NOAO Time Allocation Committee (Fall 2017, Fall 2018)  
HST Mid-cycle review TAC (2019)

---

## TEACHING

- Instructor for Introduction to Astronomy (ASTR 0113)/Honors Introduction to Astronomy (ASTR 0413)  
University of Pittsburgh, Fall 2017, 2018, Spring 2019
  - Guest Lectures for Undergraduate and Graduate Courses, University of Arizona, 2014-2015  
*ASTR 302- Introduction to Astronomical Observation, ASTR 300A - Astronomy and Astrophysics*  
*ASTR 540 - Structure and Dynamics of Galaxies*
  - Teaching Fellow, Yale University, 2007-2009  
*Designed weekly discussion sessions, led homework/exam review sessions, developed supplemental and complementary curricula, grading*  
ASTR 110 - Planets and Stars  
ASTR 120 - Galaxies and the Universe  
ASTR 160 - Frontiers and Controversies in Astrophysics
  - High School Physics & Astronomy Teacher, Poly Prep Country Day School, NY, 2003-2007  
*Designed lesson plans, introduced new curriculum, prepared laboratory experiments, graded assignments, and provided individual help and mentoring*  
*Courses: high school physics, AP physics, 8th grade physical science, and two astronomy electives*
- 

## STUDENTS SUPERVISED

- Qiana Hunt (Princeton Post-baccalaureate student, 2016-2018)
  - Wren Suess (co-supervised, UC-Berkeley graduate student, 2017-)
  - David Setton (Pitt graduate student, 2018-)
  - Alan Pearl (co-supervised, Pitt graduate student, 2018-)
  - Justin Cole (Pitt undergraduate student, 2018-)
  - Lance Taylor (Pitt undergraduate student, 2018-)
- 

## OUTREACH

- Two Scientists walk into a Bar, Pittsburgh, March 2019
  - Cleveland Museum of Natural History, Frontiers of Astronomy Lecture (275 person audience), November 2018 – *Galaxy Cannibals: The Evolution of Massive Galaxies Through Cosmic Time*
  - Astronomy on Tap - PGH, June 2018 – *The Drake Equation*
  - Carnegie Science Center Public Lecture, March 2018.
  - Astronomy on Tap - PGH, November 2017 – *How big is the Universe?*
  - Allegheny Observatory Public Lecture, November 2017 *Galaxy Cannibals - The Evolution of Massive Galaxies Through Cosmic Time*
  - UNC-Asheville Public Lecture, March 2017 *The Surprisingly Complex Lives of Massive Galaxies*
  - Steward Observatory Public Lecture, March 2014 *Galactic Cannibalism: the Growth of Massive Galaxies through Cosmic Time*, podcast: <https://www.as.arizona.edu/public-evening-lecture-series-podcasts>
  - *The Yale PhD: 150 Years of Leadership for Yale and the World*, Annual Meeting of the Association of Yale Alumni, *Invited talk*, November 2011
  - Science in the News: *The Anatomy of a Galaxy Inside-out* outreach talk, Yale, February 2011
-

**SUBMITTED AND REFEREED PUBLICATIONS**

★ - First or Second Author

51. ★ *Extremely Low Molecular Gas Content in a Compact, Quiescent Galaxy at  $z = 1.522$*   
**Bezanson, R.**, Spilker, J., Williams, C. C., Whitaker, K. E., Narayanan, D., Weiner, B., and Franx, M. 2019, ApJL, 873, L19.
50. *An Absence of Radio-loud Active Galactic Nuclei in Geometrically Flat Quiescent Galaxies: Implications for Maintenance-mode Feedback Models*  
Barišić, I., van der Wel, A., van Houdt, J., Maseda, M. V., Bell, E. F., **Bezanson, R.**, Chang, Y.-Y., Röttgering, H., van de Ven, G., and Wu, P.-F. 2019, ApJL, 872, L12.
49. *HST F160W Imaging of Very Massive Galaxies at  $1.5 < z < 3.0$ : Diversity of Structures and the Effect of Close Pairs on Number Density Estimates* Marsan, Z. C., Marchesini, D., Muzzin, A., Brammer, G. B., **Bezanson, R.**, Franx, M., Labbé, I., Lundgren, B., Rudnick, G., Stefanon, M., van Dokkum, P., Wake, D., Whitaker, K. E. 2019, ApJ, 871, 201.
48. *Complete IRAC Mapping of the CFHTLS-DEEP, MUSYC, and NMBS-II Fields* Annunziatella, M., Marchesini, D., Stefanon, M., Muzzin, A., Lange-Vagle, D., Cybulski, R., Labbé, I., Kado-Fong, E., **Bezanson, R.**, Brammer, G. B., Herrera, D., Lundgren, B., Marsan, Z. C., Nonino, M., Rudnick, G., Saracco, P., Tal, T., Valdes, F., van der Burg, R. F. J., van Dokkum, P., Wake, D., Whitaker, K. E. 2018, PASP, 130, 994, 124501.
47. *The Large Early Galaxy Astrophysics Census (LEGA-C) Data Release 2: Dynamical and Stellar Population Properties of  $z \leq 1$  Galaxies in the COSMOS Field*  
Straatman, C., van der Wel, A., **Bezanson, R.**, Pacifici, C., Gallazzi, A., Wu, P.-F., Noeske, K., Barišić, I., Bell, E. F., Calhau, J., Chauke, P., Franx, M., van Houdt, J., Labbé, I., Maseda, M. V., Muñoz-Mateos, J. C., Muzzin, A., van de Sande, J., Sobral, D., and Spilker, J. 2018, ApJS, 239, 27.
46. ★ *1D Kinematics from Stars and Ionized Gas at  $z \sim 0.8$  from the LEGA-C Spectroscopic Survey of Massive Galaxies*  
**Bezanson, R.**, van der Wel, A., Straatman, C., Pacifici, C., Wu, P.-F., Barišić, I., Bell, E. F., Conroy, C., D'Eugenio, F., Franx, M., Gallazzi, A., van Houdt, J., Maseda, M. V., Muzzin, A., van de Sande, J., Sobral, D., and Spilker, J. 2018, ApJL, 868, L2.
45. *Fast and slow paths to quiescence: ages and sizes of 400 quiescent galaxies from the LEGA-C survey*  
Wu, P.-F., van der Wel, A., **Bezanson, R.**, Gallazzi, A., Pacifici, C., Straatman, C., Barišić, I., Bell, E. F., Chauke, P., Franx, M., van Houdt, J., Muzzin, A., Sobral, D., and Wild, V. 2018, ApJ in press, arXiv:1809.01211.
44. *COSMOS-DASH: The Evolution of the Galaxy Size-Mass Relation Since  $z = 3$  from new Wide Field WFC3 Imaging Combined with CANDELS/3DHST*  
Mowla, L., van Dokkum, P. G., Brammer, G. B., Momcheva, I., van der Wel, A., Whitaker, K.E., Nelson, E., **Bezanson, R.**, Muzzin, A., Franx, M., MacKenty, J., Leja, J., Kriek, M., and Marchesini, D. 2018, Submitted to ApJ, arXiv:1808.04379.
43. *HST F160W Imaging of Very Massive Galaxies at  $1.5 < z < 3.0$ : Diversity of Structures and the Effect of Close Pairs on Number Density Estimates*  
Marsan, Z. C., Marchesini, D., Muzzin, A., Brammer, G.B., **Bezanson, R.**, Franx, M., Labbé, I., Lundgren, B., Rudnick, G., Stefanon, M., van Dokkum, P., Wake, D., and Whitaker, K.E., 2018, Submitted to ApJ, arXiv:1808.03284.
42. *Star Formation Histories of  $z \sim 1$  Galaxies in LEGA-C*  
Chauke, P., van der Wel, A., Pacifici, C., **Bezanson, R.**, Wu P.-F., Gallazzi, A., Noeske, K., Straatman, C., Muñoz-Mateos, J. C., Franx, M., Barišić, I., Bell, E. F., Brammer, G. B., Calhau, J., van Houdt, J., Labbé, I., Maseda, M. V., Muñoz-Mateos, J. C., Muzzin, A., Rix, H.-W., and Sobral, D. 2018, ApJ, 861, 1, 13.
41. ★ *Stellar and Molecular Gas Rotation in a Recently-Quenched Massive Galaxy at  $z \sim 0.7$*   
Hunt, Q., **Bezanson, R.**, Greene, J. E., Spilker, J. S., Suess, K. A., Kriek, M., Narayanan, D., Feldmann, R., van der Wel, A., and Pataarakijwanich, P. 2018, ApJL, 860, 1, L18.
40. ★ *Molecular Gas Contents and Scaling Relations for Massive, Passive Galaxies at Intermediate Redshifts from the LEGA-C Survey*  
Spilker, J. S., **Bezanson, R.**, Barišić, I., Bell, E., Lagos, C. d. P., Maseda, M., Muzzin, A., Pacifici, C., Sobral, D., Straatman, C., van der Wel, A., van Dokkum, P., Weiner, B., Whitaker, K., Williams, C. C., and Wu, P.-F. 2018, ApJ, 860, 103.
39. ★ *Spatially Resolved Stellar Kinematics from LEGA-C: Increased Rotational Support in  $z \sim 0.8$  Quiescent Galaxies*  
**Bezanson, R.**, van der Wel, A., Pacifici, C., Noeske, K., Barišić, I., Bell, E. F., Brammer, G. B., Calhau, J., Chauke, P., van Dokkum, P., Franx, M., Gallazzi, A., van Houdt, J., Labbé, I., Maseda, M. V., Muñoz-Mateos, J. C., Muzzin, A., van de Sande, J., Sobral, D., Straatman, C., and Wu, P.-F. 2018, ApJ, 858, 60.

38. *Stellar Populations of over 1000  $z \sim 0.8$  Galaxies from LEGA-C: Ages and Star Formation Histories from  $D_n4000$  and  $H\delta$*   
Wu, P.-F., van der Wel, A., Gallazzi, A., **Bezanson, R.**, Pacifici, C., Straatman, C., Franx, M., Barišić, I., Bell, E. F., Brammer, G. B., Calhau, J., Chauke, P., van Houdt, J., Maseda, M. V., Muzzin, A., Rix, H.-W., Sobral, D., Spilker, J., van de Sande, J., van Dokkum, P., and Wild, V. 2018, ApJ, 855, 85.
37. *Galaxy interactions trigger rapid black hole growth: An unprecedented view from the Hyper Suprime-Cam survey*  
Goulding, A. D., Greene, J. E., **Bezanson, R.**, Greco, J., Johnson, S., Leauthaud, A., Matsuoka, Y., Medezinski, E., and Price-Whelan, A. M., 2018. PASJ, 70, S37.
36. *Stellar Dynamics and Star Formation Histories of  $z \sim 1$  Radio-loud Galaxies*  
Barišić, I., van der Wel, A., **Bezanson, R.**, Pacifici, C., Noeske, K., Muñoz-Mateos, J. C., Franx, M., Smolčić, V., Bell, E. F., Brammer, G., Calhau, J., Chauke, P., van Dokkum, P. G., van Houdt, J., Gallazzi, A., Labbé, I., Maseda, M. V., Muzzin, A., Sobral, D., Straatman, C. and Wu, P.-F. 2017, ApJ, 847, 1, 72.
35. *★ Massive Quenched Galaxies at  $z \sim 0.7$  Retain Large Molecular Gas Reservoirs*  
Suess, K. A., **Bezanson, R.**, Spilker, J. S., Kriek, M., Greene, J. E., Feldmann, R., Hunt, Q. and Narayanan, D., 2017, ApJL, 846, L14.
34. *Morphology Dependence of Stellar Age in Quenched Galaxies at Redshift  $\sim 1.2$ : Massive Compact Galaxies Are Older than More Extended Ones*  
Williams, C. C. Giavalisco, M., **Bezanson, R.**, Cappelluti, N., Cassata, P., Liu, T., Lee, B., Tundo, E., and Vanzella, E., 2017, ApJ, 838, 94.
33. *Near-infrared Spectroscopy of Five Ultra-massive Galaxies at  $1.7 < z < 2.7$*   
Kado-Fong, E., Marchesini, D., Marsan, Z. C., Muzzin, A., Quadri, R., Brammer, G., **Bezanson, R.**, Labbé, I., Lundgren, B., Rudnick, G., Stefanon, M., Tal, T., Wake, D., Williams, R., Whitaker, K. and van Dokkum, P. 2017, ApJ, 838, 1, 57.
32. *★ Predicting Quiescence: The Dependence of Specific Star Formation Rate on Galaxy Size and Central Density at  $0.5 < z < 2.5$*   
Whitaker, K. E., **Bezanson, R.**, van Dokkum, P. G., Franx, M., van der Wel, A., Brammer, G., Förster-Schreiber, N. M., Giavalisco, M., Labbé, I., Momcheva, I. G., Nelson, E. J. and Skelton, R. 2017, ApJ, 838, 19.
31. *★ Low Gas Fractions Connect Compact Star-forming Galaxies to Their  $z \sim 2$  Quiescent Descendants*  
Spilker, J. S., **Bezanson, R.**, Marrone, D. P., Weiner, B. J., Whitaker, K. E. and Williams, C. C., 2016, ApJ, 832, 19.
30. *The 3D-HST Survey: Hubble Space Telescope WFC3/G141 Grism Spectra, Redshifts, and Emission Line Measurements for 22,548 Galaxies in the CANDELS fields*  
Momcheva, I., Brammer, G. B., van Dokkum, P. G., Skelton, R. E., Whitaker, K. E., Nelson, E. J., Fumagalli, M., Maseda, M. V., Leja, J., Franx, M., Rix, H.-W., **Bezanson, R.**, Da Cunha, E., Dickey, C., Förster Schreiber, N. M., Illingworth, G., Kriek, M., Labbé, I., Lange, J. U., Lundgren, B. F., Magee, D., Marchesini, D., Oesch, P., Pacifici, C., Patel, S. G., Price, S., Tal, T., Wake, D. A., van der Wel, A., and Wuyts, S. 2016, ApJS, 225, 27.
29. *★ Leveraging 3D-HST Grism Redshifts to Quantify Photometric Redshift Performance*  
**Bezanson, R.**, Wake, D. A., Brammer, G. B., Leja, J., Momcheva, I. G., Nelson, E. J., Quadri, R. F., Skelton, R. E., Weiner, B. J., and Whitaker, K. E. ApJ, 2016, ApJ, 822, 30.
28. *The VLT LEGA-C Spectroscopic Survey: The Physics of Galaxies at a Lookback Time of 7 Gyr*  
van der Wel, A., Noeske, K., Bezanson, R., Pacifici, C., Gallazzi, A., Franx, M., Muñoz-Mateos, J. C., Bell, A., Brammer, G., Charlot, S., Chauke, P., Labbé, I., Maseda, M. V., Muzzin, A., van de Sande, J., van Dokkum, P. G., Wild, V., and Wolf, C. 2016, ApJS, 223, 29.
27. *Forming Compact Massive Galaxies*  
van Dokkum, P. G., Nelson, E. J., Franx, M., Oesch, P., Momcheva, I., Brammer, G., Förster Schreiber, N. M., Skelton, R. E., Whitaker, K. E., van der Wel, A., **Bezanson, R.**, Fumagalli, M., Illingworth, G. D., Kriek, M., Leja, J., and Wuyts, S. 2015, ApJ, 813, 1, 23.
26. *Galaxy Structure as a Driver of the Star Formation Sequence Slope and Scatter*  
Whitaker, K. E., Franx, M., **Bezanson, R.**, Brammer, G. B., van Dokkum, P. G., Kriek, M. T., Labbe, I., Leja, J., Momcheva, I. G., Nelson, E. J., Rigby, J. R., Rix, H.-W., Skelton, R. E., van der Wel, A., and Wuyts, S. 2015 ApJL, 811, 1, L12.
25. *★ One Plane for All: Massive Star-Forming and Quiescent Galaxies Lie on the Same Mass Fundamental Plane at  $z \sim 0$  and  $z \sim 0.7$*   
**Bezanson, R.**, Franx, M., and van Dokkum, P. G. 2015, ApJ, 799, 2, 148.

24. *The Relation between Dynamical Mass-to-Light Ratio and Color for Massive Quiescent Galaxies out to  $z \sim 2$  and Comparison with Stellar Population Synthesis Models*  
van de Sande, J., Kriek, M., Franx, M., **Bezanson, R.**, and van Dokkum, P. G. 2015, ApJ, 799, 125.
23. *3D-HST WFC3-selected Photometric Catalogs in the Five CANDELS/3D-HST Fields: Photometry, Photometric Redshifts and Stellar Masses*  
Skelton, R., Whitaker, K., Momcheva, I., Brammer, G., van Dokkum, P. G., Labbé, I., Franx, M., van der Wel, A., **Bezanson, R.**, da Cunha, E., Fumagalli, M., Förster Schreiber, N., Kriek, M., Leja, J., Lundgren, B., Magee, D., Marchesini, D., Maseda, M., Nelson, E., Oesch, P., Pacifici, C., Patel, S., Price, S., Rix, H.-W., Tal, T., Wake, D., and Wuyts, S. 2014, ApJS, 214, 2, 24.
22. *The Fundamental Plane of Massive Quiescent Galaxies out to  $z \sim 2$*   
van de Sande, J., Kriek, M., Franx, M., **Bezanson, R.**, and van Dokkum, P. G. 2014, ApJL, 793, 2, L31.
21. *A Massive Galaxy in its Core Formation Phase Three Billion Years After the Big Bang*  
Nelson, E. J., van Dokkum, P. G., Franx, M., Brammer, G., Momcheva, I., Förster Schreiber, N., da Cunha, E., Tacconi, L., **Bezanson, R.**, Leja, J., Rix H.-W., Skelton, R., van der Wel, A., Whitaker, K., and Wuyts, S. 2014, Nature, 513, 7518, pp. 394-397.
20. *★ Dense Cores in Galaxies Out to  $z = 2.5$  in SDSS, UltraVISTA, and the Five 3D-HST/CANDELS Fields*  
van Dokkum, P. G., **Bezanson, R.**, van der Wel, A., Nelson, E., Momcheva, I., Skelton, R., Whitaker, K., Brammer, G., Conroy, C., Förster Schreiber, N., Fumagalli, M., Kriek, M., Labbé, I., Leja, J., Marchesini, D., Muzzin, A., Oesch, P., and Wuyts, S. 2014, ApJ, 791, 1, 45.
19. *★ Tight Correlations Between Massive Galaxy Structural Properties and Dynamics: The Mass Fundamental Plane Was in Place by  $z \sim 2$*   
**Bezanson, R.**, van Dokkum, P. G., van de Sande, J., Franx, M., Leja, J., and Kriek, M. 2013, ApJL, 779, 2, L21.
18. *Exploring the Chemical Link between Local Ellipticals and Their High-redshift Progenitors*  
Leja, J., van Dokkum, P. G., Momcheva, I., Brammer, G. B., Skelton, R. E., Whitaker, K. E., Andrews, B. H., Franx, M., Kriek, M., van der Wel, A., **Bezanson, R.**, Conroy, C., Förster Schreiber, N., Nelson, E., and Patel, S. G. 2013, ApJL, 778, 2, L24.
17. *The Stellar Kinematics of  $z \sim 2$  Galaxies and the Inside-Out Growth of Quiescent Galaxies*  
van de Sande, J., Kriek, M., Franx, M., van Dokkum, P. G., **Bezanson, R.**, Quadri, R. F., Rix, H.-W., and Skelton, R. E., 2013, ApJ, 771, 2, 85.
16. *The Velocity Function of Dark Matter Halos at  $r=20$  kpc Evolves Remarkably Little Since  $z \approx 4$ .*  
Weinmann, S. M., Franx, M., van Dokkum, P. G., and **Bezanson, R.**, 2013, ApJL, 767, L21.
15. *★ Massive and Newly Dead: Discovery of a Significant Population of Galaxies with High Velocity Dispersions and Strong Balmer Lines at  $z \sim 1.5$  from Deep Keck Spectra and HST/WFC3 Imaging*  
**Bezanson, R.**, van Dokkum, P. G., van de Sande, J., Franx, M., and Kriek, M. 2012, ApJL, 764, 1, L8.
14. *★ Evolution of Quiescent and Star-Forming Galaxies Since  $z \sim 1.5$  as a Function of their Velocity Dispersions*  
**Bezanson, R.**, van Dokkum, P. G., and Franx, M. 2012, ApJ, 760, 1, 62.
13. *Large-Scale Star Formation-Driven Outflows at  $1 < z < 2$  in the 3D-HST Survey*  
Lundgren, B. F., Brammer, G., van Dokkum, P., **Bezanson, R.**, Franx, M., Fumagalli, M., Momcheva, I., Nelson, E., Skelton, R. E., Wake, D. A., Whitaker, K., da Cunha, E., Erb, D. K., Fan, X., Kriek, M., Labbé, I., Marchesini, D., Patel, S., Rix, H. W., Schmidt, K., and van der Wel, A. 2012, ApJ, 760, 1, 49.
12. *3D-HST: A Wide-field Grism Spectroscopic Survey with the Hubble Space Telescope*  
Brammer, G. B., van Dokkum, P. G., Franx, M., Fumagalli, M., Patel, S., Rix, H.-W., Skelton, R. E., Kriek, M., Nelson, E., Schmidt, K. B., **Bezanson, R.**, da Cunha, E., Erb, D. K., Fan, X., Förster Schreiber, N., Illingworth, G. D., Labbé, I., Leja, J., Lundgren, B., Magee, D., Marchesini, D., McCarthy, P., Momcheva, I., Muzzin, A., Quadri, R., Steidel, C. C., Tal, T., Wake, D. A., Whitaker, K. E., and Williams, A. 2012, ApJS, 200, 2, 13.
11. *A Nearby Analog of  $z \sim 2$  Compact Quiescent Galaxies with a Rotating Disk*  
Jiang, F., van Dokkum, P., **Bezanson, R.**, and Franx, M. 2012, ApJL, 749, 1, L10.
10. *Spatially Resolved H $\alpha$  Maps and Sizes of 57 Strongly Star-forming Galaxies at  $z \sim 1$  from 3D-HST: Evidence for Rapid Inside-out Assembly of Disk Galaxies*  
Nelson, E. J., van Dokkum, P. G., Brammer, G., Förster Schreiber, N., Franx, M., Fumagalli, M., Patel, S., Rix, H.-W., Skelton, R. E., **Bezanson, R.**, da Cunha, E., Kriek, M., Labbé, I., Lundgren, Quadri, R., and Schmidt, K. B. 2012, ApJL, 747, 2, L28.

9. *A Large Population of Massive Compact Post-starburst Galaxies at  $z > 1$ : Implications for the Size Evolution and Quenching Mechanism of Quiescent Galaxies*  
Whitaker, K. E., Kriek, M., van Dokkum, P. G., **Bezanson, R.**, Brammer, G., Franx, and M., Labbé, I. 2012, ApJ, 745, 2, 179.
8. *First Results from the 3D-HST Survey: The Striking Diversity of Massive Galaxies at  $z > 1$*   
van Dokkum, P. G., Brammer, G., Fumagalli, M., Nelson, E., Franx, M., Rix, H.-W., Kriek, M., Skelton, R. E., Patel, S., Schmidt, K. B., **Bezanson, R.**, Bian, F., da Cunha, E., Erb, D. K., Fan, X., Förster Schreiber, N., Illingworth, G. D., Labbé, I., Lundgren, B., Magee, D., Marchesini, D., McCarthy, P., Muzzin, A., Quadri, R. F., Steidel, C. C., Tal, T., Wake, D. A., Whitaker, K. E., and Williams, A. 2011, ApJL, 743, 1, L15.
7. *★ Redshift Evolution of the Galaxy Velocity Dispersion Function*  
**Bezanson, R.**, van Dokkum, P. G., Franx, M., Brammer, G. B., Brinchmann, J., Kriek, M., Labbé, I., Quadri, R., Rix, H.-W., van de Sande, J., Whitaker, K. E., and Williams, R. J. 2011, ApJL, 737, 2, L31.
6. *The Stellar Velocity Dispersion of a Compact Massive Galaxy at  $z = 1.80$  Using X-Shooter: Confirmation of the Evolution in the Mass-Size and Mass-Dispersion Relations*  
van de Sande, J., Kriek, M., Franx, M., van Dokkum, P. G., **Bezanson, R.**, Whitaker, K. E., Brammer, G., Labbé, I., Groot, P. J., and Kaper, L. 2011, ApJL, 736, 1, L9.
5. *The NEWFIRM Medium-band Survey: Photometric Catalogs, Redshifts, and the Bimodal Color Distribution of Galaxies out to  $z \sim 3$*   
Whitaker, K. E., Labbé, I., van Dokkum, P. G., Brammer, G., Kriek, M., Marchesini, D., Quadri, R. F., Franx, M., Muzzin, A., Williams, R. J., **Bezanson, R.**, Illingworth, G. D., Lee, K.-S., Lundgren, B., Nelson, E. J., Rudnick, G., Tal, T., and Wake, D. A. 2011, ApJ, 735, 2, 86.
4. *The Age Spread of Quiescent Galaxies with the NEWFIRM Medium-band Survey: Identification of the Oldest Galaxies Out to  $z \sim 2$*   
Whitaker, K. E., van Dokkum, P. G., Brammer, G., Kriek, M., Franx, M., Labbé, I., Marchesini, D., Quadri, R. F., **Bezanson, R.**, Illingworth, G. D., Lee, K.-S., Muzzin, A., Rudnick, G., and Wake, D. A. 2010, ApJ, 719, 2, 1715-1732.
3. *The Growth of Massive Galaxies Since  $z = 2$*   
van Dokkum, P. G., Whitaker, K. E., Brammer, G., Franx, M., Kriek, M., Labbé, I., Marchesini, D., Quadri, R., **Bezanson, R.**, Illingworth, G. D., Muzzin, A., Rudnick, G., Tal, T., and Wake, D. A. 2010, ApJ, 709, 2, 1018-1041.
2. *The Frequency of Tidal Features Associated with Nearby Luminous Elliptical Galaxies From a Statistically Complete Sample*  
Tal, T., van Dokkum, P. G., Nelan, J., and **Bezanson, R.**, 2009, AJ, 138, 5, 1417-1427.
1. *★ The Relation Between Compact, Quiescent High-redshift Galaxies and Massive Nearby Elliptical Galaxies: Evidence for Hierarchical, Inside-Out Growth*  
**Bezanson, R.**, van Dokkum, P. G., Tal, T., Marchesini, D., Kriek, M., Franx, M., and Coppi, P. 2009, ApJ, 697, 2, pp. 1290-1298.

## ADDITIONAL PUBLICATIONS

3. *Why astronomy programs are moving on from the physics GRE*  
Levesque, E. M., **Bezanson, R.**, and Tremblay, G., Physics Today,  
[physicstoday.scitation.org/doi/10.1063/PT.5.9090](https://physicstoday.scitation.org/doi/10.1063/PT.5.9090).
2. *Physics GRE Scores of Prize Postdoctoral Fellows in Astronomy*  
Levesque, E. M., **Bezanson, R.**, and Tremblay, G., arXiv:1512.03709.
1. *★ The Surprisingly Complex Lives of Massive Galaxies*  
**Bezanson, R.** 2013, Proceedings of the F. N. Bash Symposium 2013, New Horizons in Astronomy (BASH 2013).