# Sanjeev S. Seahra

## Brief Curriculum Vitae

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#### Education

1998-2003 Doctor of Philosophy in Physics Location: Department of Physics, University of Waterloo 1994-1998 • Bachelor of Science in Honours Physics Location: Department of Physics, University of Waterloo **Academic Positions and Affiliations** 2024-2029 • Dean of Science University of New Brunswick, Fredericton, New Brunswick 2019-2024 • Chair of Department of Mathematics & Statistics University of New Brunswick, Fredericton, New Brunswick (N.B. one-year leave 2022-23) 2018 -• Professor of Applied Mathematics University of New Brunswick, Fredericton, New Brunswick 2016-2024 Director of AARMS Atlantic Association for Research in the Mathematical Sciences (AARMS) 2012-2018 • Associate Professor of Applied Mathematics Location: University of New Brunswick, Fredericton, New Brunswick 2012 -• Cross-appointed Professor of Physics Location: University of New Brunswick, Fredericton, New Brunswick 2010-2012 • Assistant Professor of Applied Mathematics Location: University of New Brunswick, Fredericton, New Brunswick 2011 -• Affiliate Member Location: Perimeter Institute for Theoretical Physics, Waterloo, Canada 2007-2009 • Postdoctoral Fellow Location: University of New Brunswick, Fredericton, New Brunswick 2005-2007 • PPARC (STFC) Postdoctoral Fellow (UK) Location: Institute of Cosmology & Gravitation (ICG), University of Portsmouth, UK 2003-2005 • NSERC Postdoctoral Fellow (Canada) Location: Institute of Cosmology & Gravitation (ICG), University of Portsmouth, UK

## Selected Grants, Awards, Fellowships and Honours

• UNB Faculty Merit Award
University of New Brunswick, Canada

## Selected Grants, Awards, Fellowships and Honours (continued)

2022–24	University Research Scholar     University of New Brunswick, Canada
2021–22	• NSERC Discovery Institute Support Funding obtained on behalf of the Atlantic Association for Research in the Mathematical Sciences, Canada
2019, 21	• Innovation Mobilization Program $(\times 2)$ Springboard Atlantic, Canada
2021-22	• Emerging Infectious Disease Modelling Initiative  National Sciences and Engineering Research Council of Canada (NSERC) (large team grant to AARMS and other mathematical institutes)
2021-24	• AARMS Director's postdoctoral fellowship Atlantic Association for Research in the Mathematical Sciences, Canada and the University of New Brunswick
2010-26	• NSERC Discovery Grant $(\times 3)$ National Science and Engineering Research Council, Canada
2020-21	• New Brunswick 2019 Novel Coronavirus (COVID-19) Rapid Research Funding Opportunity New Brunswick Health Research Foundation (NBHRF)
2020-21	<ul> <li>Canadian 2019 Novel Coronavirus (COVID-19) Rapid Research Funding Opportunity Canadian Institutes of Health Research (CIHR) (large team grant)</li> </ul>
2019	Regional economic growth through innovation     Atlantic Canada Opportunities Agency, Canada
2019	NSERC Engage Grant     National Science and Engineering Research Council, Canada
2018–21	• NSERC PromoScience Grant (×2) obtained on behalf of the AARMS, Canada
2015–2017	• AARMS Collaborative Research Group: Mathematical and physical aspects of black holes Atlantic Association for Research in the Mathematical Sciences, Canada (academic administrator and principal organizer for 2015-16; member 2016-17)
2014	• Excellence in Teaching Award Faculty of Science, University of New Brunswick, Canada
2011-2014	NSERC Early Career Researcher Supplement     National Science and Engineering Research Council, Canada
2007,09,11	<ul> <li>Classical and Quantum Gravity Research Highlight of the Year (×3)</li> <li>"Tomimatsu-Sato geometries, holography and quantum gravity"</li> <li>"Ricci flows, wormholes and critical phenomena"</li> <li>"A gravitational wave window on extra dimensions"</li> </ul>
2010	• Start-up Grant University of New Brunswick, Canada
2005–2007	<ul> <li>PPARC Postdoctoral Fellowship (Personal)</li> <li>Particle Physics &amp; Astronomy Research Council (now known as the Science and Technology Facilities Council), United Kingdom</li> </ul>
2004	• W. B. Pearson Medal for Creative Doctoral Research Faculty of Science, University of Waterloo, Canada
2003–2005	Canada–UK Millennium Research Fellowship Royal Society of London, United Kingdom
2003–2005	NSERC Postdoctoral Fellowship     National Science and Engineering Research Council, Canada

### Selected Grants, Awards, Fellowships and Honours (continued)

2003	Ontario Graduate Scholarship in Science and Technology
1998–2002	Government of Ontario, Canada  • NSERC Postgraduate Scholarships (A and B)
1770 2002	National Science and Engineering Research Council, Canada
1998	Alumni Gold Medal
	Faculty of Science, University of Waterloo, Canada
1998	• Second place in Lloyd G. Elliot Prize Exam
	Canadian Association of Physicists, Canada
1995–1997	• Sir Isaac Newton Alumni Award
	Department of Physics, University of Waterloo, Canada
1994–1997	• Canada Scholarship
	Government of Canada
1994	• Sir Isaac Newton Entrance Scholarship
	Department of Physics, University of Waterloo, Canada
1994	Governor General's Bronze Medal     Government of Canada
	Government of Canada
	Recent popular Science, Outreach and Media Appearances
2020-21	<ul> <li>Media mentions and interviews related to COVID-19</li> </ul>
	♦ Even without Omicron, NB cases on steep upward trend, CHMA 106.9 FM (Dec 22, 2021)
	<ul> <li>Arrivée du variant Omicron: faut-il privilégier le masque médical?, Radio-Canada, ICI Nouveau-</li> </ul>
	Brunswick (Nov 30, 2021)
	♦ COVID-19 modelling: the complex science of simple lines, <i>UNB Research Blog</i> (Oct 15, 2021)
	♦ N.B. COVID-19 roundup: 109 new cases, 63 people in hospital, CBC NB (Oct 12, 2021)
	♦ COVID-19 hospitalizations could double within a month, new N.B. projections show, CBC NB (Oct 9, 2021)
	<ul> <li>Delta plus, Delta, Lambda variants: Why experts are watching, Telegraph-Journal (paywall; July 7, 2021)</li> </ul>
	<ul> <li>Dr. James Watmough and Dr. Sanjeev Seahra join research project tackling COVID-19, University</li> </ul>
	2. James

♦ NB math profs join national team to map—and stop—COVID-19, Times and Transcript, Daily

Interviewed on Global TV Halifax Morning about "AllSySTEMsGo" AARMS-Girl Guides event for 500

Principal academic organizer of the "AllSySTEMsGo" AARMS-Girl Guides camp for 500 girls aged

• Quoted in Gizmodo article "Have Gravitational Waves Scarred the Fabric of Spacetime?" (May 22, 2017)

• "What's the matter with gravity?" public lecture given at the University of New Brunswick on Novem-

• "Einstein's ripples" talk given to students in grades 7-9 attending the Annual UNB-CMS Math Camp

in the Daily Huddle website huddle.today/unb-researcher-sanjeev-seahra/ (July 8, 2016)

"Einstein's ripples" public lecture given at the University of New Brunswick on February 23, 2016

• Quoted in CBC article "Einstein's gravity theory passes extreme test on zombie star" (July 4, 2018)

of New Brunswick Annual Report 2020 (March 2021)

♦ The Journal Pioneer newspaper (May 14, 2018)
 ♦ Rogers TV online video segment (May 14, 2018)

• Interviewed about my appointment as the Director of AARMS

2019

2018

2018

2017

2016

2016

2016

2016

ber 24, 2016

(May 15, 2016)

Gleaner and Telegraph-Journal (paywall; April 8, 2020)

girls aged 9–17 at Dalhousie and Saint Mary's universities (May 11–12, 2019)

♦ in *The Daily Gleaner* and *The Telegraph-Journal* newspapers (July 9, 2016)

### Recent popular Science, Outreach and Media Appearances (continued)

• Interviewed about the discovery of gravitational waves by LIGO

- on the Canadian Broadcasting Corporation's radio/TV programme Information Morning Fredericton (February 12, 2016); and
- ♦ in *The Daily Gleaner* and *The Telegraph-Journal* newspapers (February 12, 2016)

• "100 years of general relativity" public lecture given at the University of New Brunswick on May 6, 2015 (the talk was also featured on the CBC New Brunswick evening news television programme on May 5, 2015)

#### Industrial and non-academic collaborations

2023	<ul> <li>Patchell Brook Equity Analytics (funded by New Brunswick Innovation Research Fund)</li> </ul>
2022-	• Department of Health and Community Services, Government of Newfoundland and Labrador (funded by a
	Newfoundland and Labrador research contract)
2022	<ul> <li>Department of Health and Wellness, Government of Prince Edward Island</li> </ul>
2021-22	<ul> <li>Department of Health and Social Services, Government of Northwest Territories</li> </ul>
2021-	• The Black Arcs (funded by a Department of Defence Ideas grant held by The Black Arcs)
2020-	• Department of Health, Government of New Brunswick (funded by a New Brunswick research contract)
2019	• C-Therm (funded by NSERC Engage grant)

### **Other Activities**

2019–2023 • Co-chair
Bridges 2023 Mathematics and Art Conference local organizing committee

2018–2021 • Principal co-organizer

AARMS Industrial Problem Solving Workshops 2018, 2019, 2021