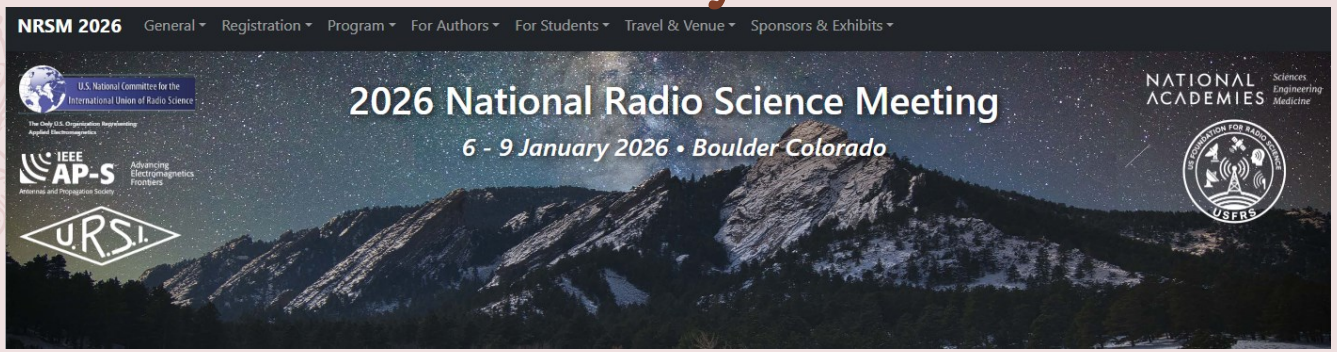
WRITTEN TRIBUTES

Special Session in Memory of Prof. V. N. Bringi



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Electrical & Computer Engineering Department - Colorado State University's Post

⭐Honoring a pioneer in weather radar science⭐

Mark your calendar and join us for a three-part, full-day special session dedicated to the life, legacy, and scientific impact of the late Prof. V. N. Bringi, a global leader in weather radar polarimetry.

🎉 Prof. Bringi Memorial Special Session at Annual National Radio Science Meeting
📍 Limelight Hotel | Boulder, Colorado
🗓️ January 8, 2026
🔗 Session details: https://lnkd.in/gAkDYEqg

Program:
- 13 technical presentations showcasing state-of-the-art research
- Short open mic session
- Presentation of written tributes recognizing Prof. Bringi's influence
- Closing remarks by Prof. Edwin Chong, ECE Dept Head
- Concluding group discussion

This session is organized by Prof. Branislav Notaros (CSU), Dr. Merhala Thurai (CSU), and Dr. Kumar Vijay Mishra (US Army Research Lab), ECE alumnus.

Kumar Vijay Mishra, US DEVCOM Army Research Laboratory

"Some collaborations are chosen for their technical promise; others are pursued because they offer the rare gift of learning from a remarkable human being. My own journey with Professor V. N. Bringi began with the latter impulse. I was drawn to a particular research problem not merely for its scientific intrigue, but because it gave me another opportunity to work with him—to learn, once again, how he thought about research and about our field. Through these interactions, I came to appreciate a lineage of scholarship that extended even further back: his father, Dr. N. V. Bringi, was himself a distinguished academic. There was an almost poetic symmetry in our paths—Dr. Bringi's father completed his PhD at the University of Haifa in Israel and pursued postdoctoral work at Iowa State University, while I pursued my PhD at the University of Iowa before heading to Technion Israel for my own postdoctoral training. These unexpected correspondences often felt like gentle reminders that my association with Prof. Bringi was shaped by a kind of serendipity I can only describe as providential."

Continued…

Kumar Vijay Mishra, US DEVCOM Army Research Laboratory

" That sense of 'divine intervention' became even clearer during my postdoctoral years, when Prof. Bringi encouraged me to apply for a position at the U.S. Army Research Laboratory in Maryland. His belief in me at that moment proved pivotal. Later, while I was at ARL, he sent me what he described—characteristically modestly—as a 'simple question.' It was anything but simple. What followed was nearly a month of thoughtful exchanges over emails and Skype calls, as I worked through obscure properties of quotient random variables to resolve the problem he had posed. Watching how he approached the question—patiently, rigorously, and with genuine curiosity—was a masterclass in scientific thinking. Yet what remains most vivid in my memory is not the mathematics, but the joy on his face when he held the three volumes of our co-edited book in his hands. It was a moment that revealed how deeply he cared about ideas, craftsmanship, and the legacy of knowledge."

Continued…

Kumar Vijay Mishra, US DEVCOM Army Research Laboratory

" Above all, Professor Bringi was a portrait of humility. His towering technical achievements and visionary influence in radar meteorology never translated into ego or distance. He treated students and early-career researchers as true colleagues, engaging with them respectfully and generously. In countless conversations over the years, I never once sensed condescension—only kindness, intellectual honesty, and an eagerness to listen. His writing was clear, succinct, and beautiful, reflecting the same clarity he brought to his thinking. Beyond science, he delighted in discussions of world history and spirituality, conversations that revealed a depth of reflection and humanity that enriched everyone around him. My many calls with him between 2015 and 2024 are among my most cherished memories. For me, and for so many others, Professor V. N. Bringi was not only an extraordinary scientist and educator, but a guiding light—one whose influence will continue to shape our field and our lives for generations to come."

Dusan Zrnic (NSSL, and OU, Oklahoma)

"I have known Bringi for over 40 years. And remember meeting him at NCAR while he was analyzing Z_{dr} obtained with the CP-2 radar. I think that Paul Smith was with us, and we agreed that Bringi and Seliga had really found gold. And this prophecy proved to be right. I also vividly remember a day in Memphis when I walked into the radar trailer. The radar was observing a convective cell. I do not remember if it was NCAR's radar or CHILL? But I recall seeing for the first time the Z_{DR} column. And I asked Bringi if this was a routine observation. He replied that it was the first time that they saw it. I recall that Bringi and Roger Wakimoto wrote a brilliant paper on the subject."

Continued…

Dusan Zrnic (NSSL, and OU, Oklahoma)

"Later I collaborated with Bringi. He visited NSSL around 1991 and we collected some time series polarimetric data. We wrote at least one paper where we manually classified the hydrometeor types using Z, Z_{DR}, ρ_{hv}, Φ_{DP} and radial velocity. Later NSSL gave CSU a spare transmitter and Bringi contributed some data in the simultaneous H, V mode. The proof that the concept works, and Dick Doviak wrote a paper with Bringi and me as coauthors. Later I worked with Bringi on a few chapters for his book as well as a paper about dual polarization history (2019). During the last two decades I had numerous interaction with Bringi about our health. I last visited him in the January of 2024."

Frank Gekat (LEONARDO Germany GmbH)

“I first met Prof. Bringi in 2001. At that time, the AMS International Conference on Radar Meteorology was taking place in Munich, and Selex Sistemi Integrati GmbH invited the participants to visit us in Neuss. (At that time, we were better known under the name “Gematronik.” Today, we are Leonardo Germany GmbH.) Prof. Bringi was one of the visitors. For us, he was an icon of science, and we were very surprised at how interested he was in the technology of our products. Since then, I have tried to stay in touch.”

Continued…

Frank Gekat (LEONARDO Germany GmbH)

"Later, when the first operational polarimetric weather radars were developed and came onto the market, he and Merhala Thurai helped us develop the corresponding algorithms and, in 2004, published the "Dual Polarization Handbook" with us, which was intended to help our customers understand the new technology. The handbook was so successful that it was republished in an expanded form in 2007."

"In 2022, Bringi and Merhala asked me if we could contribute to the planned new book "Advances in Weather Radar." We decided to provide a contribution on the joint operation of radar and Doppler lidar. However, there were no previous publications on this topic, and we were entering completely uncharted territory. Nevertheless, Bringi gave us the opportunity to publish our work as a chapter in the new book."

Continued…

Frank Gekat (LEONARDO Germany GmbH)

"For me, Prof. Bringi was always a good friend and a reliable advisor. My colleagues at Leonardo who knew him personally and I will miss him greatly.

Fig. 1 Picture taken 2001 during the visit of our company

Witold F. Krajewski

Rose & Joseph Summers Chair in Water Resources Engineering, University of Iowa

"Dr. Bringi has influenced my research by his advances and contribution to radar polarimetry. I have been aware of his work since early 90s and have talked to him often at meetings and conferences. I always found him engaging and interested in my observational research. His probing questions clearly demonstrated his desire to understand how the "radar-rainfall" puzzle pieces fit together. It was very rewarding for me to co-author a paper with him, Merhala and Vijay, here, in 2017. In fact, to further honor his memory and his profound contributions, I presented an invited paper at the IEEE radar conference in Krakow, Poland in October. The paper built on the earlier, 2017, work and was co-authored by Jim Smith from Princeton University and Bongchul Seo from the Missouri University of Science & Technology. Dr. Bringi will live with us through our memories and his published works."

Mathew Kumjian

Department of Meteorology and Atmos. Sci., The Pensylvania State University

"My very first interaction with Bringi was at a radar conference when I was a graduate student. I had just given a talk, and he got up and was first in line to ask a question. Needless to say, I was terrified! But my fear was misplaced. Of course, he had an insightful question and was respectful and encouraging. I was able to talk to him afterwards, which felt very much to me like I was talking to a celebrity. He treated me as a colleague. That first interaction still sticks with me. For someone with such a huge name in the field, he was approachable, encouraging, and not at all egotistical. Our subsequent interactions over the years confirmed to me that Bringi was always passionately curious about the science and treated everyone with respect, regardless of where we were in our careers."

Continued…

Mathew Kumjian

Department of Meteorology and Atmos. Sci., The Pensylvania State University

"I regret not having the opportunity to work more closely with Bringi and will miss seeing him at radar conferences. But I know his legacy and his enormous impact on our field will keep his memory at the forefront of our minds. Thank you, Prof. Bringi, for everything you did for our field and for me in my career, including not scaring the heck out of me during that first interaction."

Mircea Grecu (Morgan State University)

"I first met Professor Bringi at the 2002 TRMM Science Team Meeting. He approached me after a presentation I had given, offering insightful comments and generously sharing some of his latest findings. I was deeply honored as I was aware that, as Alain Protat once put it so well, he was one of the *Gods* of radar meteorology.

From that point on, we continued to meet regularly at conferences and corresponded over the years on topics such as particle size distributions and their relationships to radar observations. His thoughtful guidance and curiosity made every exchange meaningful.

The highlight of our collaboration came in late 2020 and early 2021, during the pandemic lockdown, when I joined a study he was leading alongside other scientists. Our measurements and theoretical calculations agreed so well that he asked, with his characteristic humility and dry wit: **"Have we wasted our time all these years gathering imperfect measurements when theoretical calculations work so well?"**

Continued…

Mircea Grecu (Morgan State University)

"I don't believe we wasted our time with those measurements. But I do believe we would be wasting a lot more time today had it not been for Professor Bringi's seminal contributions to radar meteorology, and for his remarkable ability to inspire, challenge, and connect people in pursuit of scientific understanding."

"Thank you, Professor Bringi for your insight, your generosity, and your example. You helped shape the field as well as the careers and thinking of so many of us. You will be deeply missed and long remembered."

Alexis Berne, EPFL, Lausanne, Switzerland

“Not being able to join this session, I would like to thank the organizers and the conveners for giving me the opportunity to share my tribute to Bringi.”

“As many of us, I first saw Bringi during conferences related to radar meteorology when I was a PhD student or young postdoc and was impressed by his stature. I later met him more personally, when I was a young assistant prof, during a discussion about how to quantify the spatial structure of a precipitation field and the possible use of geostatistics (Merhala was there as well!). He then came to Lausanne for a nice visit to my group during which we had nice discussions and exchanges.”

Continued…

Alexis Berne, EPFL, Lausanne, Switzerland

"Bringi was obviously a giant in our field, with a vast and deep knowledge about all aspects of weather radar. But Bringi was also very open and friendly, remaining easily accessible to young scientists (like I was) despite his stature."

"Few have had such an impact in our field of radar meteorology, and I am thankful to Bringi for all his contributions and for showing us what passion and dedication can achieve."

Tim Raupach (UNSW, Sydney, Australia)

"Working with Professor Bringi was inspiring, and I enjoyed his insightful reasoning and ability to see the larger research picture. I also will not forget his kindness and encouragement towards me while I was beginning in my research career."

David Hudak (Ontario, Canada)

"The weather radar research group at Environment and Climate Change Canada had the privilege of partnering with Professor Bringi and his research associates for more than a decade as part of ground validation studies for the NASA CloudSat and Global Precipitation Measurement Mission projects. During that time, he guided and inspired us as a collaborator, teacher and during the validation projects as a co-worker in the field. His scientific excellence, dedication, patience and good humor served as an inspiration to our group, helping us to come of age. I came to know him personally as a mentor, gracious host, and a personal confidante. I learned from him what scientific research is all about. It was an honor to know and work together with such a great man and better human being."

Ahoro Adachi, Hiroshi Yamauchi
(MRI, Japan Meteorological Agency)

“Prof. Bringi visited Japan many times, always offering us his warm encouragement and precise guidance.

When we traveled to CSU in 2010, to seek advice on artifact issues related to our newly introduced solid-state dual-polarization weather radar, he welcomed us kindly, listened with great care, and shared his invaluable wisdom.

Thanks to his thoughtful guidance, Japan’s solid-state dual-polarization radar network has grown into a system that today continues to help protect lives by reducing the impact of meteorological disasters.

We will forever hold in our hearts our deepest gratitude to Prof. Bringi, whose generosity, wisdom, and dedication nurtured both Japan’s weather radar researchers and the advanced weather radar technology.”

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Ahoro Adachi, Hiroshi Yamauchi (MRI, Japan Meteorological Agency)

In Tsukuba, Japan,
with members of
MRI, NIED, and NICT.
Dec. 14, 2011

Miguel A Rico-Ramirez

(School of Civil, Aerospace and Design Engineering , University of Bristol, UK)

"I had the privilege to collaborate with Prof Bringi during the summer of 2010 when he was awarded a Visiting Professorship by the Leverhulme Trust to visit the University of Bristol for a period of four months. His visit enabled a productive collaboration centered around the analysis of data from a polarimetric weather radar, located in Thurnham, in Kent, UK. During his time at the University of Bristol, Bringi delivered several lectures on the advances in radar precipitation measurement where he discussed several aspects of weather radar technology, and most advanced topics related to the use of dual-polarization weather radar to improve rainfall estimation."

Continued…

Miguel A Rico-Ramirez

(School of Civil, Aerospace and Design Engineering , University of Bristol, UK)

"He was also invited to a dual polarization radar calibration workshop at the Met Office in Exeter where he delivered a presentation on radar data quality. His presentation was well received by the UK Met Office, as they were in the process of upgrading the UK weather radar network to polarimetric systems at the time. I had the privilege of learning from him on radar algorithms, raindrop size distribution characteristics, attenuation correction schemes and the development of polarimetric rain rate estimators. He had a brilliant mind and outstanding knowledge of every aspect of radar meteorology. He will be truly missed."

Miguel Galvez (Raytheon)

"Prof. V.N. Bringi was my PhD advisor at Colorado State University. I am truly honored to have had the privilege to work with him. Through Prof. Bringi's compassion, patience, and teachings, he guided me to successfully defend my PhD in 2015, and I made a small contribution to the Polarimetric Weather Radar community. My family and I are truly grateful for Dr Bringi, a true pillar of the academic and scientific communities. You will truly be missed."

Yahya Golestani (Honeywell Aerospace)

“I was Dr. Bringi’s third Ph.D. student. I was 25 when I joined his Ph.D. group, I didn’t know how old he was, and I didn’t know until last October when I visited him. I didn’t know it would be our last visit, it was quite emotional for me, we both enjoyed the visit, with some difficulty we were able to talk. Among other things, he asked what I am doing these days, and he complemented me. Then he asked how old I was, I said 65, with a smile on his face, he said, “oh 10 years younger than me.”

“Reflecting back, when I joined his Ph.D. group, he was 35 year young. At such a young age he was already an accomplished and distinguished professor in the department. His research findings on radar polarimetry were well read, well received, and well talked about in the radar community across the globe.”

Continued…

Yahya Golestani (Honeywell Aerospace)

"Dr. Bringi was a true genius and a gifted person that we all, especially his students, benefited from. But there was another dimension to his personality that I always admired. Despite being famous at such a young age, he was a down-to-earth and a humble man. He was well-mannered, extremely polite and had a very likeable personality. He had a big heart. I always learned from him, not just technical, but an important life-long lesson."

"Dr. Bringi, I will always love you and I am always proud to be your student."

Rest in peace❤
Yahya Golestani

Andrew Newman, NSF NCAR

“I remember Bringi as one of the all-time greats. He was an amazing scientist and a wonderful, kind person. I was an undergraduate student taking Radar Meteorology when I was first introduced to Bringi's name, through his definitive textbook Polarimetric Doppler Weather Radar: Principles and Applications. I then was able to meet Bringi at the 2005 AMS Radar conference as a 1st year MS student and still clearly remember being star struck and nervous, but his kindness and genuine interest in my poster presentation put me at ease right away. It was the highlight of that meeting for me.”

Continued…

Andrew Newman, NSF NCAR

"I was then lucky to reconnect with Bringi nearly a decade later in 2013 and collaborate on an NSF proposal with him, Branislav, and others at Colorado State University. That proposal was funded, and we went on to have a great collaboration over the next nearly a decade. I remember many insightful conversations and was always amazed at how clearly and cleanly he could describe to me what I thought were difficult radar meteorology concepts. I deeply appreciate and am very thankful for all my time with Bringi."

Bulletin of the
American Meteorological Society
May 2025, pp 320-322 (digital version)

Authors Merhala Thurai (left) and Kumar Vijay Mishra (right) with Bringi at a dinner during the 95th AMS Annual Meeting in Phoenix, Arizona, in January 2015.

"Beyond his immense scientific achievements, he was a model of humility, kindness, and grace—a mentor, friend, and inspiration to generations."

Tribute Events in 2025

- April 2025, Graz, Austria: **"Polarimetric Weather Radars – Colloquium"**.
  Conveners: Michael Schönhuber, and Franz Teschl.
- August 2025, Sydney, Australia: **URSI Asia-Pacific Radio Science Conference.**
  CF-1 and CF-2: Weather Radar (Tribute to Prof. V. N. Bringi).
  Conveners: Madhukar Chandra (Chemnitz, Germany) and K. V. Mishra (ARL, US)
- August 2025, Toronto, Canada: **41st International Conference on Radar Meteorology**
  Evening Reception: Tribute to Prof. V. N. Bringi - The Scientist, Educator, and Mentor
  Conveners: M. Thurai, K.V. Mishra, P. T. May.
- October 2025, Krakow, Poland: **IEEE 2025 Radar Conference**
  Session Code: B5L-F – Polarimetric Weather Radar [in Memory of Prof. V.N. Bringi]
  Conveners: K. V. Mishra, M. Thurai, F. Yanovski.

Edwin Chong

Head of Electrical and Computer Engineering Dept. Colorado State University

“Professor V. N. Bringi has many connections with this community as well as with the Department of Electrical and Computer Engineering at CSU. First, he had been a member of our faculty since 1981. This connection with us lasted longer than the span of many entire careers, and we have been the main beneficiary. To countless colleagues, students, and collaborators over several decades, he served as someone to emulate. When I first joined our department exactly twenty years after Professor Bringi, he was one of the first people to reach out and welcome me. I will never forget his kindness.”

Continued…

Edwin Chong

Head of Electrical and Computer Engineering Dept. Colorado State University

"Second, Professor Bringi contributed immensely to the research reputation and stature of our department. Indeed, he is credited for the current international visibility of radar remote sensing research at CSU, one of our main areas of strengths. Professor Bringi's pioneering work on polarimetric Doppler weather radar continues to inspire new generations of researchers wanting to have meaningful impact. His co-authored book on this topic has remained an authoritative source for a quarter of a century. Even till the end of his life, Professor Bringi continued to contribute actively to the research literature. When he was completing a project about a year ago to co-edit a three-volume series on advances in weather radar, he showed me the three jacket cover designs with youthful enthusiasm and glee, even in the midst his very challenging health issues."

Continued…

Edwin Chong

Head of Electrical and Computer Engineering Dept. Colorado State University

To quote Dr. Kumar Vijay Mishra, one of the co-editors, "Despite the immense challenges of his condition, he personally reviewed every chapter, meticulously evaluated each detail, and contributed to every aspect of the book, including selecting cover images. Just for the second volume's cover image, he iterated with Josh Wurman to collect and refine data, ensuring the plots met his precise vision. This remarkable story of resilience and determination serves as an inspiration to all."

"Finally, Professor Bringi is connected to our community through the many personal relationships that he had over the years. Despite his global reputation and stature as a giant in the research community, his unassuming disposition and disarming smile always brought warmth and comfort to people around him. He was well-loved and admired. We miss him dearly."

Branislav Notaros, Merhala Thurai, Kumar Vijay Mishra
Session Co-Chairs: Special Session in Memory of Prof. V. N. Bringi

- With gratitude, we thank the many students, collaborators, colleagues, and contributors who shaped and advanced polarimetric weather radar over the past five decades.
- Above all, we thank the global polarimetric weather radar community, whose shared curiosity, rigor, and generosity reflect the values that Prof. V.N. Bringi exemplified throughout his life and career.
- Prof. Bringi's legacy lives on through this community and its continued work.

'Stretching' in Keflavik, Iceland
01 Aug 2018

Group photo of the presenters after the technical presentations

08 January 2026
The Den Room
Limelight Hotel
Boulder, Colorado