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*In memoriam*

# Jean-François Geleyn (1950 – 2015)

One of the strongest personalities and a brilliant thinker within the broader Numerical Weather Prediction (NWP) community passed away on January 8. Jean-François had the vision that meteorology was „on the move" and in an intensive need of first class scientists. It was clear to him that the atmospheric science was not only useful in daily life, but also the one of sciences where theories could be immediately checked against reality.

He joined early the ECMWF team in Reading in 70's and soon became a very recognized fellow of this outstanding group; there Jean-François was in charge for the radiation scheme development as well as other parts of the physics parameterization package of the first ECMWF model. After Jean-François came back from Reading in 1982, he led the complete rewriting of the physics packages for the French numerical meteorological models. Furthermore, in 1985, he became the head of the NWP research team at Météo-France in Toulouse. It appeared very clear soon that Jean-François developed great ideas and ambitions for various services and eventually even polices. With his enthusiasm and vast knowledge he was capable of attracting numerous excellent young scientists and train them in the spirit of sound scientific background and coding efficiency that he had pioneered. He recognized quite early that variational assimilation was going to offer great opportunities to take advantage of the new satellite data and thus to improve the weather analysis and forecasting using NWP systems. Perhaps the best overall idea of Jean-François was that of the „stretching grid on the sphere", based on the Schmidt conformal transform, that became the essence of the global model ARPEGE. This idea of Jean-François allowed for the development of a fruitful cooperation between ECMWF and Météo-France and working on a common integrated code, i.e., IFS-ARPEGE, soon deploying variational assimilation and leading to significant improvements in short-range forecasts over Europe. Moreover, starting in 1990 Jean-François was headed toward ALADIN consortium, aiming at a joint enterprise of NWP limited-area system that various countries could adapt to thier own needs and wishes.


**Figure 1.** Jean-François Geleyn (second from left) with participants of the ALADIN traning workshop held in September 1997 in Météo-France (Toulouse).

The limited area modeling procedure became available within the IFS-ARPEGE code. Although without a common place to work, a common computer code was developed and rather soon ALADIN became known as one of the world best

**Figure 2.** Jean-François Geleyn (black circle) with participants of the ALATNET seminar on Numerical methods held in Kranjska gora (Slovenia) in 2002.

limited area NWP systems, which soon involved more than a dozen of countries including Croatia. New ideas, very often initialized by Jean-François, were developing fast within the ALADIN consortium and the corresponding systems; some of those ideas are realized as Arome at Météo-France, or Alaro or Harmonie in the other countries. Next, (largely the Central European) ALADIN and the Scandinavian HIRLAM communities joined together in 2005, thus sharing their parameterizations schemes, data assimilation techniques, scientists, experiences and more. Playing a very significant role in that overall NWP systems merging, Jean-François also became an associate professor in Ghent, Belgium. He shall also be long remembered for his scientific papers on turbulence, radiation and convection. The highest distinction provided by the European Meteorological Society, the Silver Medal, Jean-François received in 2011.

Going almost 20 years back, Jean-François became a member of the editorial board of *Geofizika* in 1996 starting with volume 13. A few members of the Geophysical Institute Andrija Mohorovičić had a privilege and a great opportunity to meet and to collaborate with him during stays in Toulouse Centre of Météo -France (Fig. 1) or be participants in ALATNET workshops (Fig. 2). He shall be remembered as a kind, smiling, helpful but at the same time very energetic person, whose knowledge about any aspect of ALADIN, numerical modeling as such and meteorology, was huge and undeniable and who was known and called between his colleagues „The Multitasking".

Jean-François had many other passions: sport is perhaps the best known one, as in his youth he was a beacon in Judo and Shot Put and later developed an excellent level in Decathlon. For leisure he spent time learning history and creating original hand-drawn maps.

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