

Considering Membership in IFIP Working Group 2.5?

The International Federation for Information Processing (IFIP) was established under the auspices of UNESCO in 1960 to promote international cooperation in the field of information processing. IFIP does its work through a collection of 13 Technical Committees (TCs) and some 100 working groups. Working Group 2.5 on Numerical Software (WG 2.5), which is part of TC2 on Software Theory and Practice, works to improve the quality of scientific computation by promoting the development and availability of sound numerical software. WG 2.5 members, who come from all over the world, are elected both in recognition of the substantial contributions that they have already made to the field, but also for their commitment to actively participate in WG 2.5 projects. There are currently about 30 active members, along with a similar number of affiliated members.

WG 2.5 does its work both through direct exchange of information among its members, informal interactions between research groups at the local level, as well as more formal interactions with the research community at large. For example, WG 2.5 members take turns hosting the yearly WG 2.5 business meeting at their home institutions. At these meetings members discuss the latest developments associated with topics that the group has decided to formally track, as well as craft plans for joint projects. In addition, each meeting is paired with a “local workshop” to foster exchange of information between the working group and researchers with an interest in numerical software in the local area.

Every 3-5 years WG 2.5 sponsors a major “working conference.” These larger and more formal events with published proceedings, are designed to highlight emerging issues of importance to the numerical software community. Recent examples include: Uncertainty Quantification in Scientific Computing (Boulder, CO, USA, 2011), Grid-based Problem-Solving Environments (Prescott, AZ, US, 2006), the Architecture of Scientific Software (Ottawa, Canada, 2000), The Quality of Numerical Software: Assessment and Enhancement (Oxford, UK, 1996).

As the main voice of the numerical software community internationally, WG 2.5 has also exerted considerable influence in the development of good numerical software practices. For example, it has made important contributions to the development of standards for Fortran and IEEE arithmetic. More recently it helped influence the improvement of the Java language for numerical computing, and helped spawn efforts within the IEEE to develop a standard for interval arithmetic.

While the main goal of WG 2.5 is to have an impact on the practice of numerical computing at large, there are definitely additional benefits that accrue to individual members. Collegial interactions with fellow members are always rewarding, but the resulting strong network of contacts with senior leaders, some of whom occupy sub-fields with which one might not normally interact, is invariably useful. Also, interaction with local researchers at WG 2.5 meeting venues all over the world gives one a much broader perspective of research efforts, and viewpoints, than one is likely to obtain otherwise. Finally, speaking through the working group can provide researchers significant leverage to promote their ideas and effect change within the broader scientific computing community.

Consider becoming part of this international community of research leaders!