```
   aaa          cccccc       mmmmm   mmmmm
  a   a        cc    cc      mm mm   mm mm
 aa    aa      cc      c     mm  mm mm  mm
  aaaaaaaaa    cc           mm    mmmm    mm
 aa      aa    cc      c    mm     m     mm     MEETING NOTICE
 aa      aa    cc    cc     mm           mm
aa       aa    ccccccc      mm           mm     Free and open to the public
```

Topic: **Array Oriented Functional Programming in APL**
Speaker: **Morten Kromberg**

When: **Tuesday, September 17th, 2019, 7:30 pm**

Where: **Marist College, Hancock Center, Room 2023**

Directions: **Building 14 on the map at http://www.marist.edu/about/map.html**

Parking: Please park at black dot #10 on http://www.marist.edu/about/map.html (the lot
               North of the Hancock Center #14) or in the lot on the South-East corner of Route 9 &
               Fulton St. (S/E of the former Main Entrance).

About the Topic: APL is a member of a group of languages that are approaching middle age. Ken Iverson's book, *A Programming Language*, was published in 1962. APL was very influential in the 60s and 70s, and widely used to deliver "end user computing" — but although its read-eval-print loop, dynamic scope, and lack of a type system endeared APL to domain experts, it also drew fire from computer scientists, most famously when Edsger Dijkstra declared that "APL is a mistake, carried through to perfection."

Although APL moved out of the computing mainstream, and disappeared from many computer science departments in the 80s, the language has evolved continuously for 50 years, in an environment where dozens of bright new languages have burst into view and faded again. Current Dyalog APL is a modern, array-first, multi-paradigm programming language, which supports functional, object-oriented and imperative programming based on an APL language kernel.

Dyalog APL allows people with good ideas — from bright high school students to Ph.D.s — to contribute directly to the software development process using a notation which fits comfortably with those used in their own domains. Curiously, although APL was designed as a notation for communication between humans, with little regard for computer hardware architecture, the array operations supported by APL turn out to make extremely efficient use of modern hardware. Modern hardware has multiple cores and depends on efficient use of cache memories — and as a result, functional, array oriented programming is more relevant than ever before.

About the Speaker: Morten Kromberg is the CTO of Dyalog Ltd — a leading vendor of APL systems. Before that he spent 20 years as an APL consultant, and 5 years as the CTO of Adaytum Software, where he was responsible for the development of a business intelligence package which used Dyalog APL as the core technology. Following the sale of Adaytum to Cognos in 2002 for $160 million, Morten participated in a management buy-in of Dyalog's APL technology in 2005. In 1990, together with Dyalog CEO Gitte Christensen, Morten received SIGAPL's Kenneth E. Iverson Award for an Outstanding Contribution to the Development and Application of APL. Morten is a regular speaker at international software conferences.

Cost: **Our meeting is Free and open to the public**

Dinner: **6:00 pm, Palace Diner, 845.473.1576**
               Map and menu: www.thepalacediner.com
               All are welcome to join us for dinner

We thank Marist College for hosting the chapter's meetings.

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