The habitability of Mars over time and implications for Mars2020 rover landing site selection

The mission of NASA's upcoming Mars2020 rover is to seek out signs of life on ancient Mars, and to collect samples for eventual return to Earth. The Mars science community is currently considering where on Mars the 2020 rover should land, and proposed landing sites include a diverse suite of environments spanning nearly one billion years of martian geologic history. However, the habitability of ancient martian environments likely changed significantly over this time period. This talk will discuss the rationale behind the proposed 2020 landing sites and their context within the martian geologic record.