



KEMIJSKI INŠTITUT

Vabilo na Forum40 / Invitation to the Forum40

Dr. Martina Lenarčič Živkovič

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Četrtek / Thursday, 17.3.2022 ob / at 13:00 / on WEBEX

<https://ki-ljubljana.webex.com/ki-ljubljana/j.php?MTID=m86b31aaba5424b5364211b1ff1706425>

Meeting number (access code): 2732 435 1446

Meeting password: marecKI2022

The role of G-hairpins in the yeast cell cycle

Telomere maintenance in most eukaryotes is associated with the ability of telomeric DNA to form G-quadruplex structures, based on regular tandem G-rich repeats. In collaboration with Czech colleagues we showed that G-rich 3'-overhang in *Saccharomyces cerevisiae*, in contrast to G-quadruplexes, forms unprecedented fold-back DNA structures stabilized by dynamic G:G base pairs, i.e. pseudo-circular G-hairpins (PGHs). Detailed insights into the structural characteristics of PGHs revealed their potential role in the telomeric biology of yeast and exposed PGHs as a novel structural class of DNA motifs that can be formed by G-rich sequences.



Vljudno vabljeni / Kindly invited