1172-31-285   **Paul M. Gauthier*** (`paul.m.gauthier@umontreal.ca`), , Canada, and **Mohammad Shirazi**.
Limits of harmonic and holomorphic functions along segments ending at the boundary. Preliminary report.

For $x \in \mathbb{R}^n = \mathbb{R} \times \mathbb{R}^{n-1}$, with $x = (p, y)$, $p \in \mathbb{R}^{n-1}, y \in \mathbb{R}$, and certain sets $A \subset \mathbb{R}^{n-1}$ and functions u on A, we show the existence of harmonic functons $U(x)$ on the upper half-space $\{x = (p, y) \in \mathbb{R}^n, \ y > 0\}$, having prescribed vertical limits $U(p, y) \to u(p)$, as $y \downarrow 0$. Analogous results are considered for domains in $\mathbb{R}^n$ consisiting of point $x = (p, y)$, $y > L(p)$, lying above the graph $\{(p, y) : y = L(p)\}$ of a function $L(p)$ defined on a domain in $\mathbb{R}^{n-1}$, as well as for polydomains and starlike domains. Such questions are also investigated for holomorphic functions of several variables. (Received August 30, 2021)