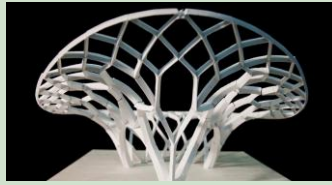
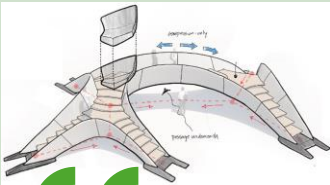


CARBon-negative COMpression dominant structures for decarbonized and deconstructable CONcrete buildings

“Envisioning decarbonized and deconstructable compression dominant structures”





Developing a **carbon-negative concrete mixture**, suitable for processing through additive manufacturing, producing **discrete blocks** out of it and employing them in an innovative structural system consisting of **compression dominant members**.



Carbon-negative concrete recipes, based on local available by-products and using carbonation for concrete hardening.



Compression dominant structural systems, following design strategies using assemblies of 3D printed concrete blocks.



Open-source design-to-fabrication digital pipeline, further considering the durability performance and quantified sustainability through LCA.



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