



MIT Media Lab's Concept Car: with GM and Frank O. Gehry

General Motors, by developing and critically designs for a concept car. The eventual will be construction of a full-scale, running car will be hybrid powered, and drive-by-wire sufficient intelligence to know the city that it provide not just transportation, but an efficient interface to the resources that the city offers particularly concerned with innovative electronics, new materials and processes, and the for interior space, exterior form, and the experience. We will work from the beginning in a 3D geometric modeling environment (Catia) make extensive use of rapid prototyping and for producing physical scale models.

Smart Cities Group

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MIT Media Lab

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1. Motor-Wheel

Electrically powered, independently controllable **wheels** with motor, suspension, brakes, and steering contained within each wheel assembly. Placing the suspension within the wheel itself is a significant innovation, and promises some important advantages. Each wheel has only two inputs: electrical power and digital data.



Goal: Create self-contained mobile units

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2. Exoskeleton

An **exoskeleton** that connects the wheels and supports the passenger cabin, storage units, and power source. This element can be optimized for structural efficiency, and (like the frame of a sophisticated bicycle) can become a major design feature.

Goal: High level of customization



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3. Drive-by-Wire

In place of traditional steering column and dashboard arrangements. This allows radical reconfiguration of the cockpit, treatment of the passenger compartment as a module that can readily be separated from the rest of the car, and creation of a multimedia driving experience that intelligently integrates data streams from a wide variety of sources and presents them to the driver and passengers in a customized, context-sensitive way.

Goal: Interior Design Freedom

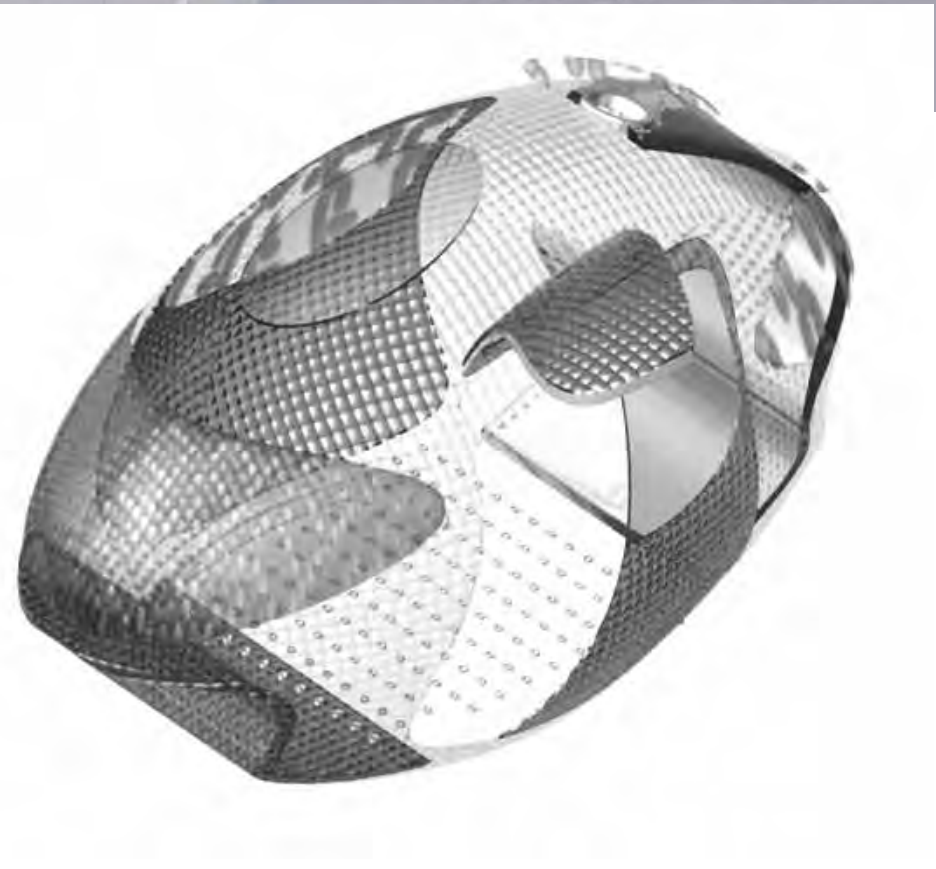


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4. No Crumple

A lightweight, technologically advanced **passenger compartment** suspended safely within the exoskeleton, like an egg protected within an egg carton. This compartment need not be fabricated from sheetmetal and glass. It can exploit the possibilities of advanced materials and embedded electronics to provide high levels of visibility, safety, climate control, lighting, sensing capability, and interior displays. And it provides an opportunity to break away from the familiar automobile aesthetic of painted sheetmetal



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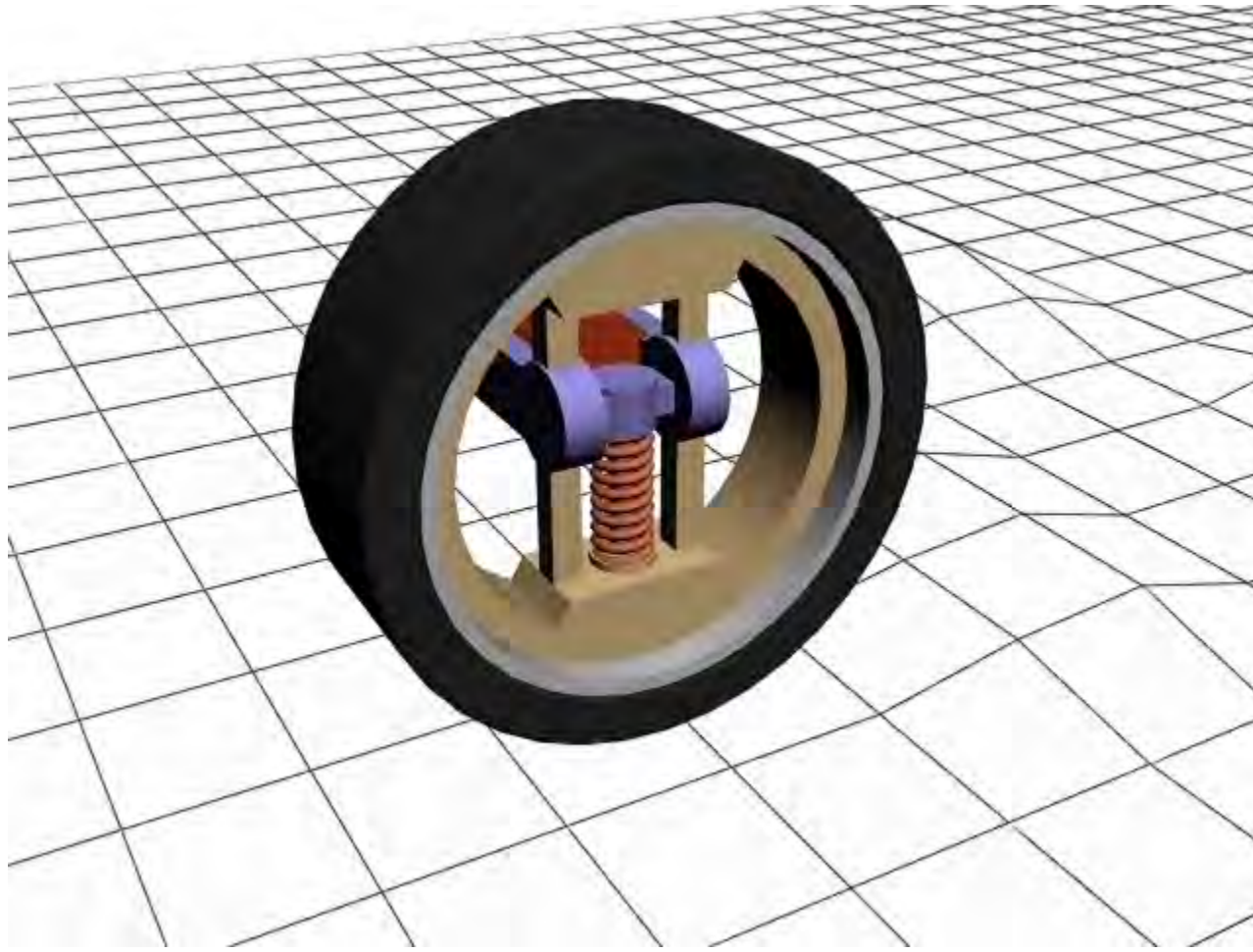
5. Hold Safely

Go beyond seatbelts and airbags. Think of the passenger seat, from the beginning, as a gentle robot that knows how to hold you safely and comfortably under any conditions that may be encountered.

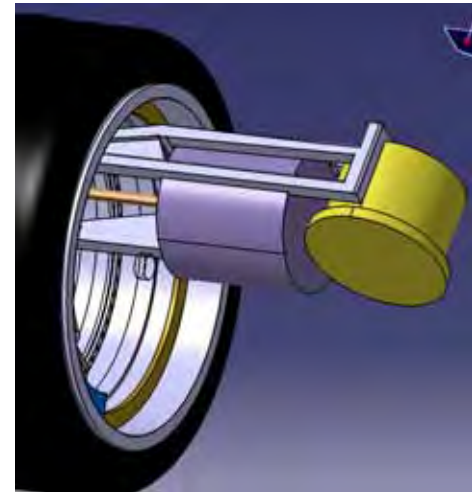
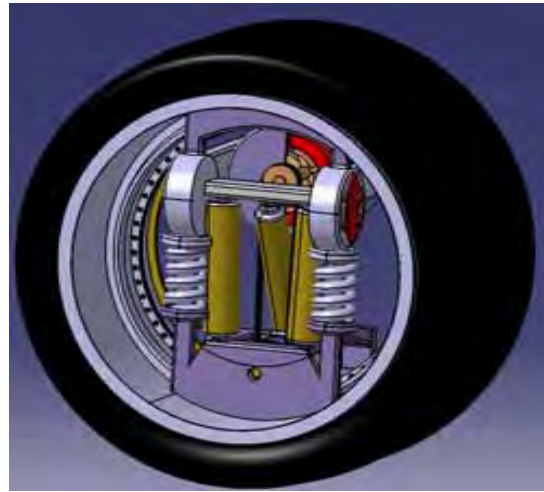
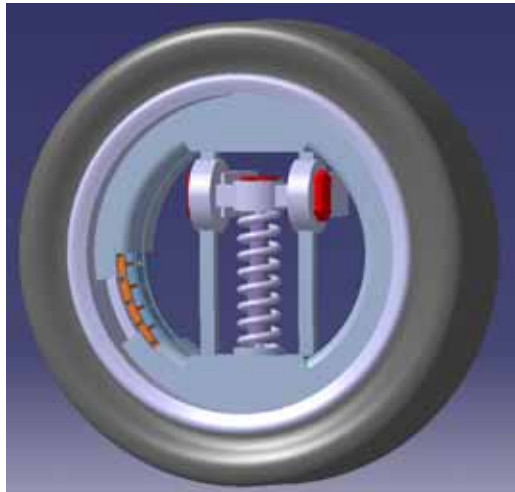
Goal: zero passenger deaths.



quick review in- wheel suspension

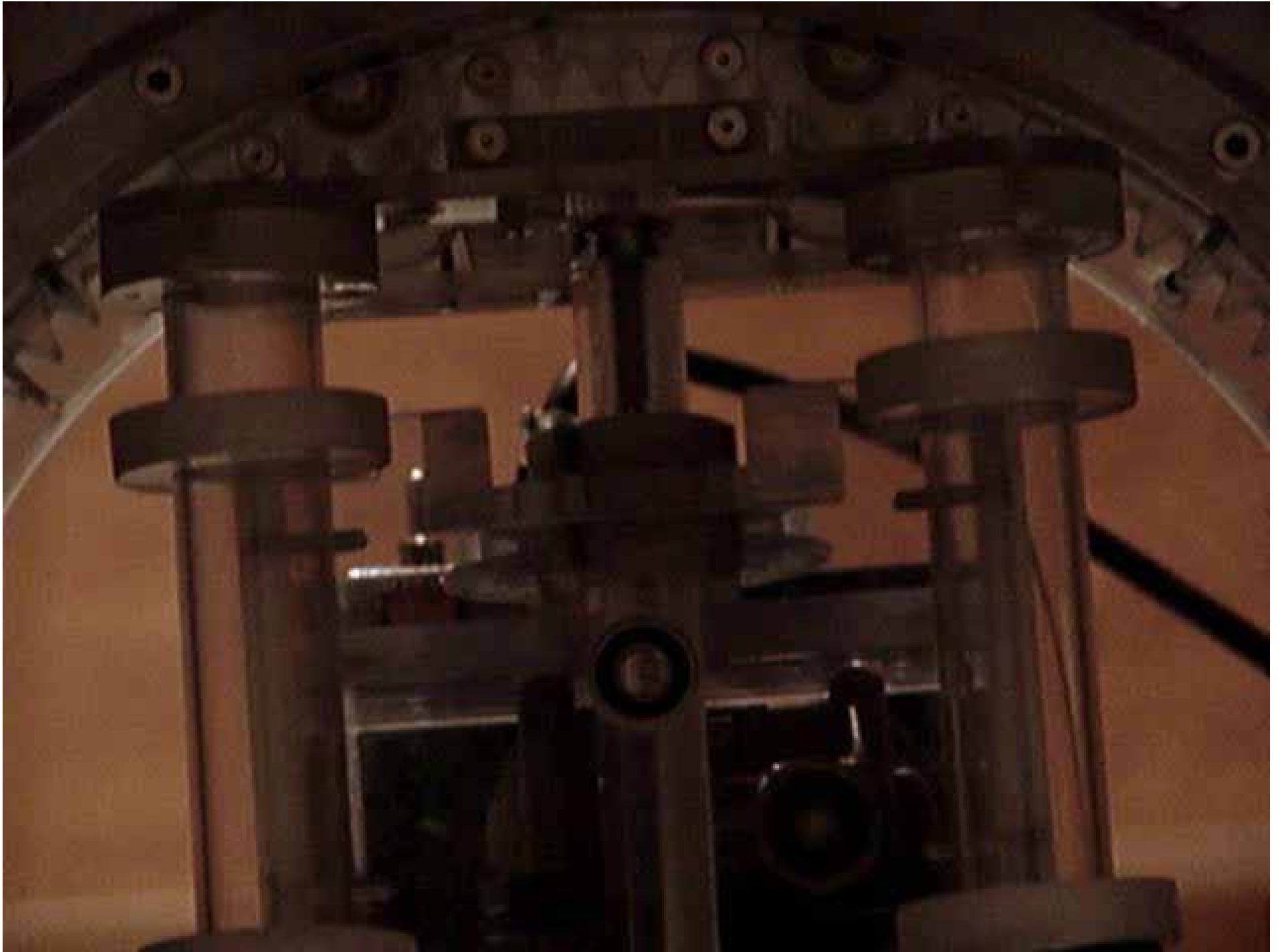


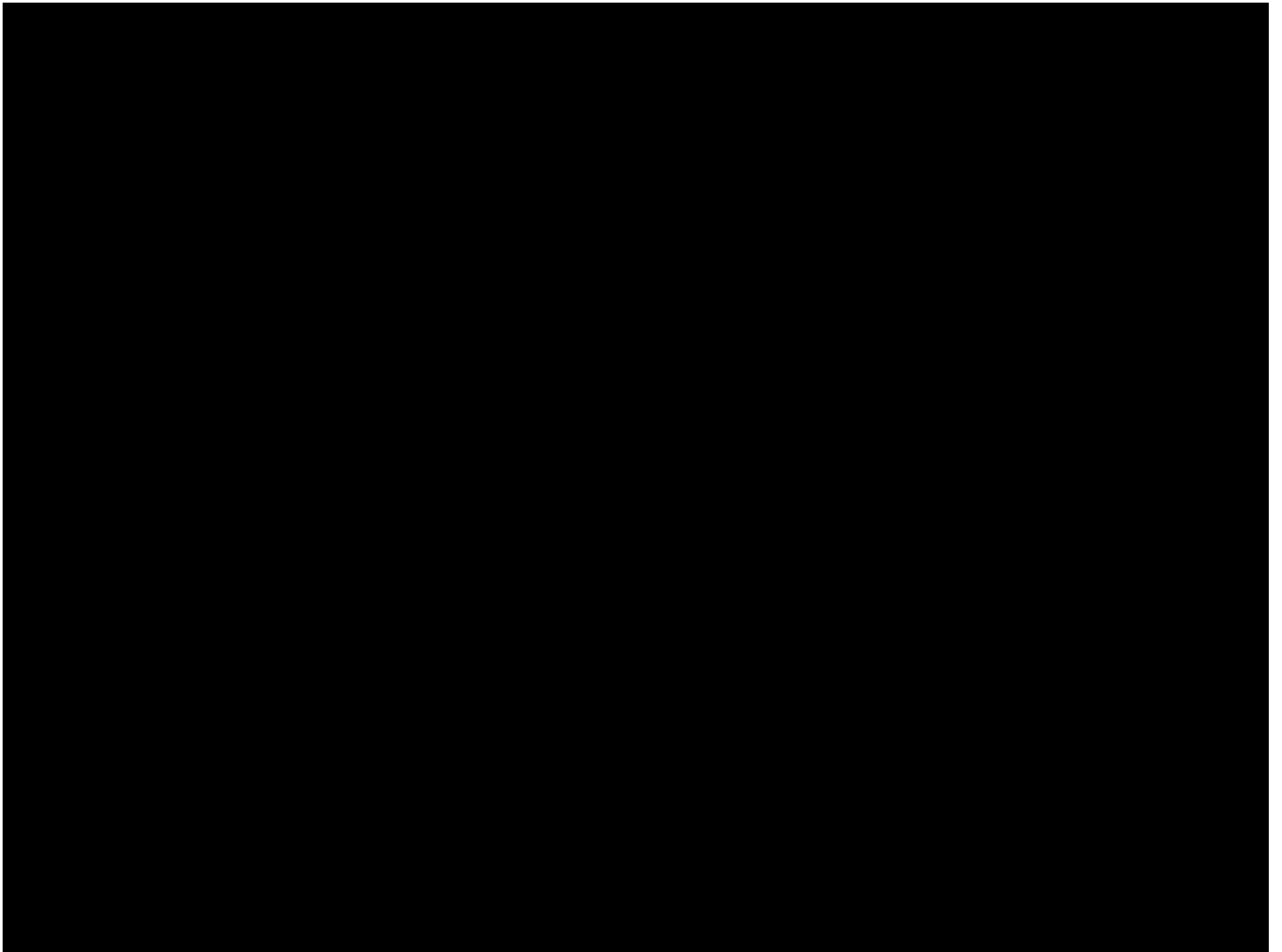
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running prototype #1- a summer's work

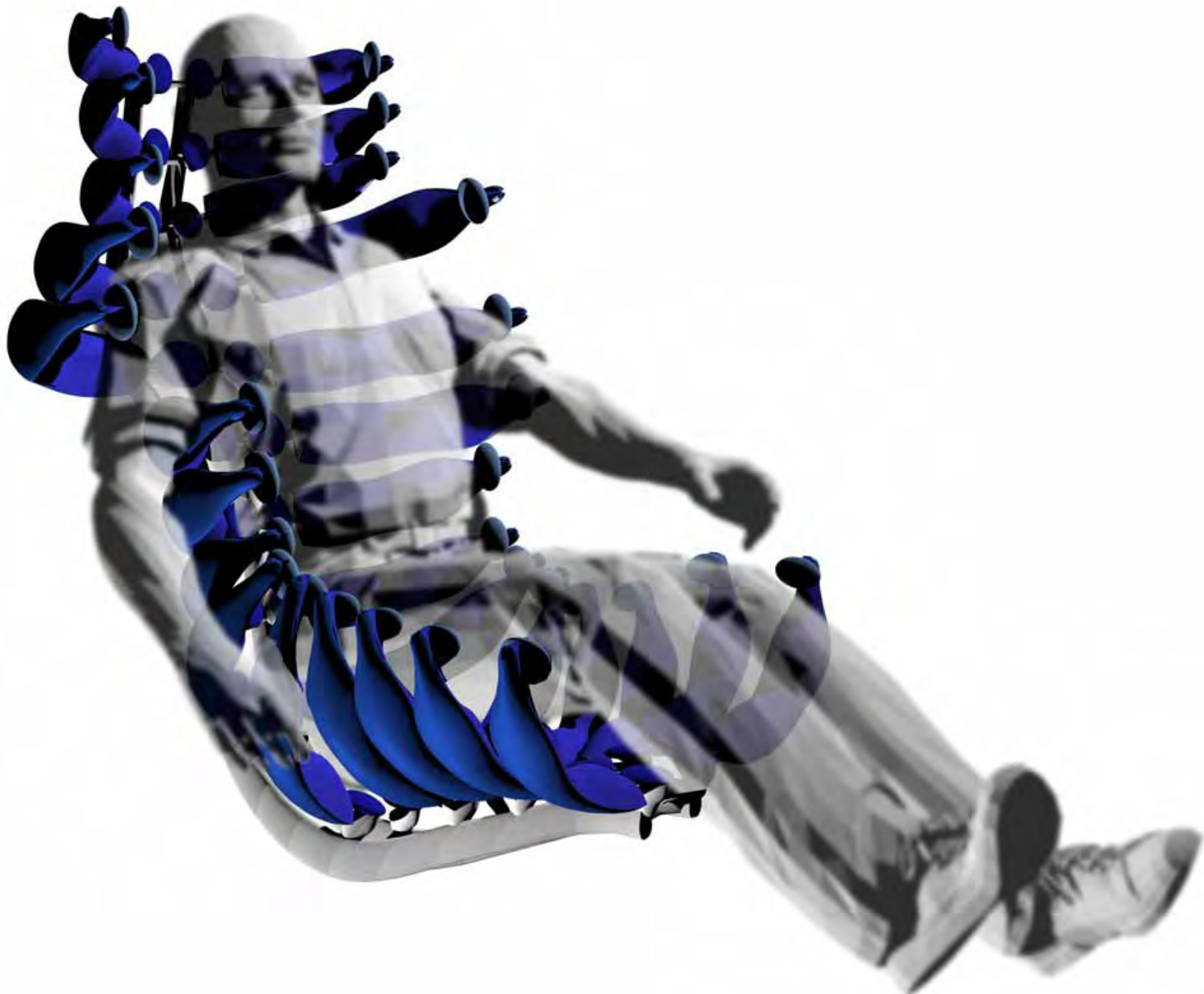






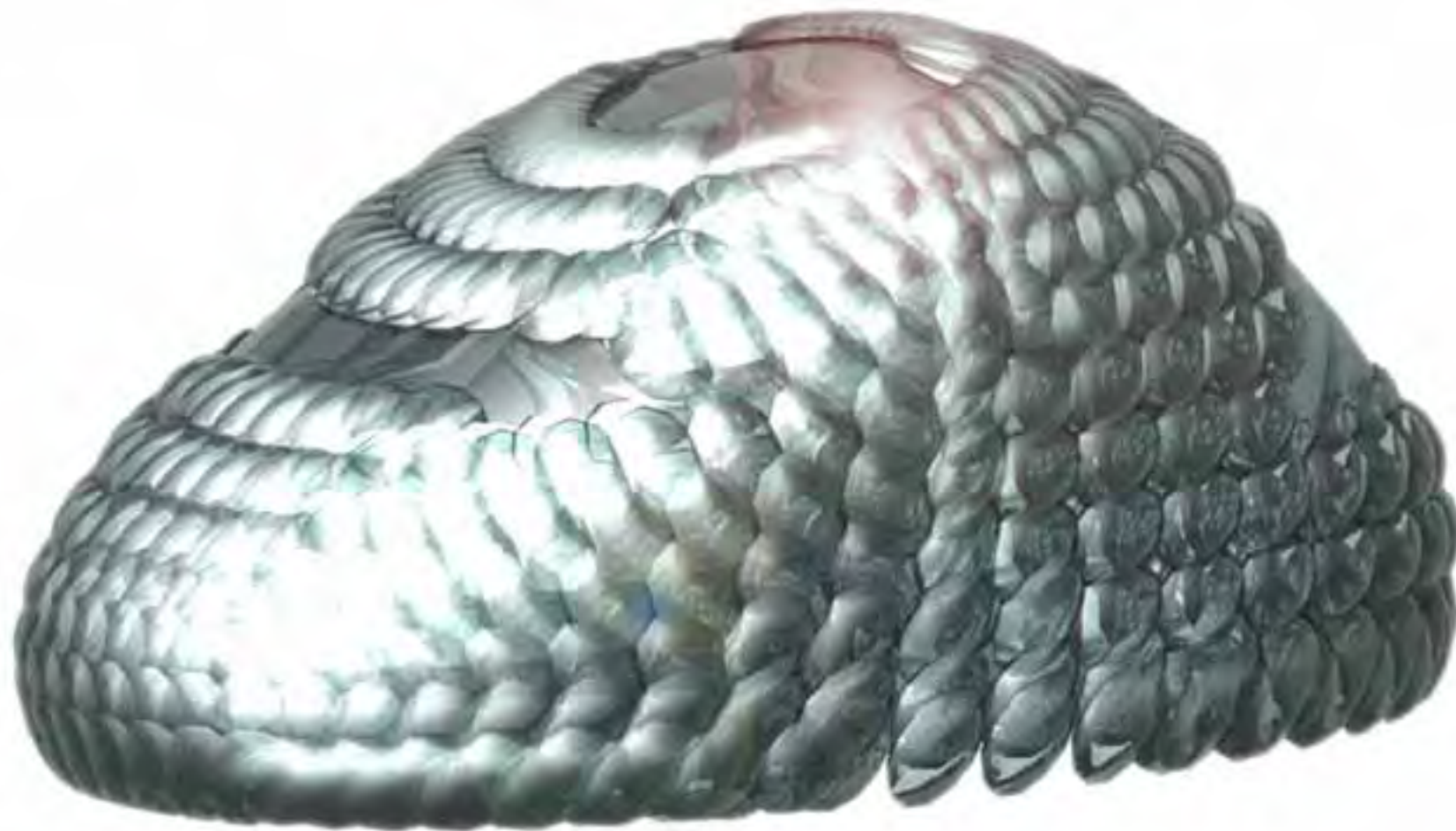


SOFT_Car

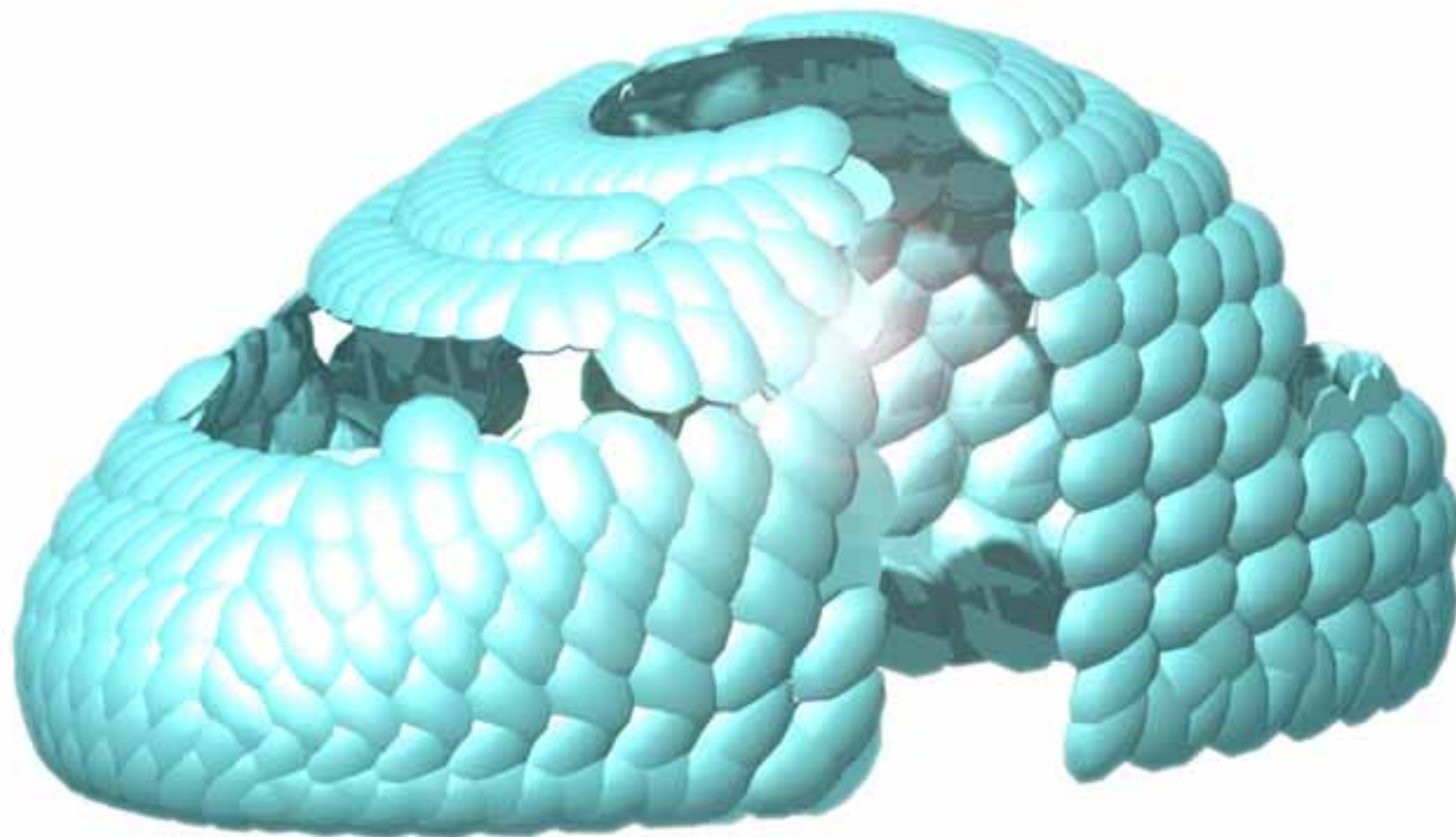




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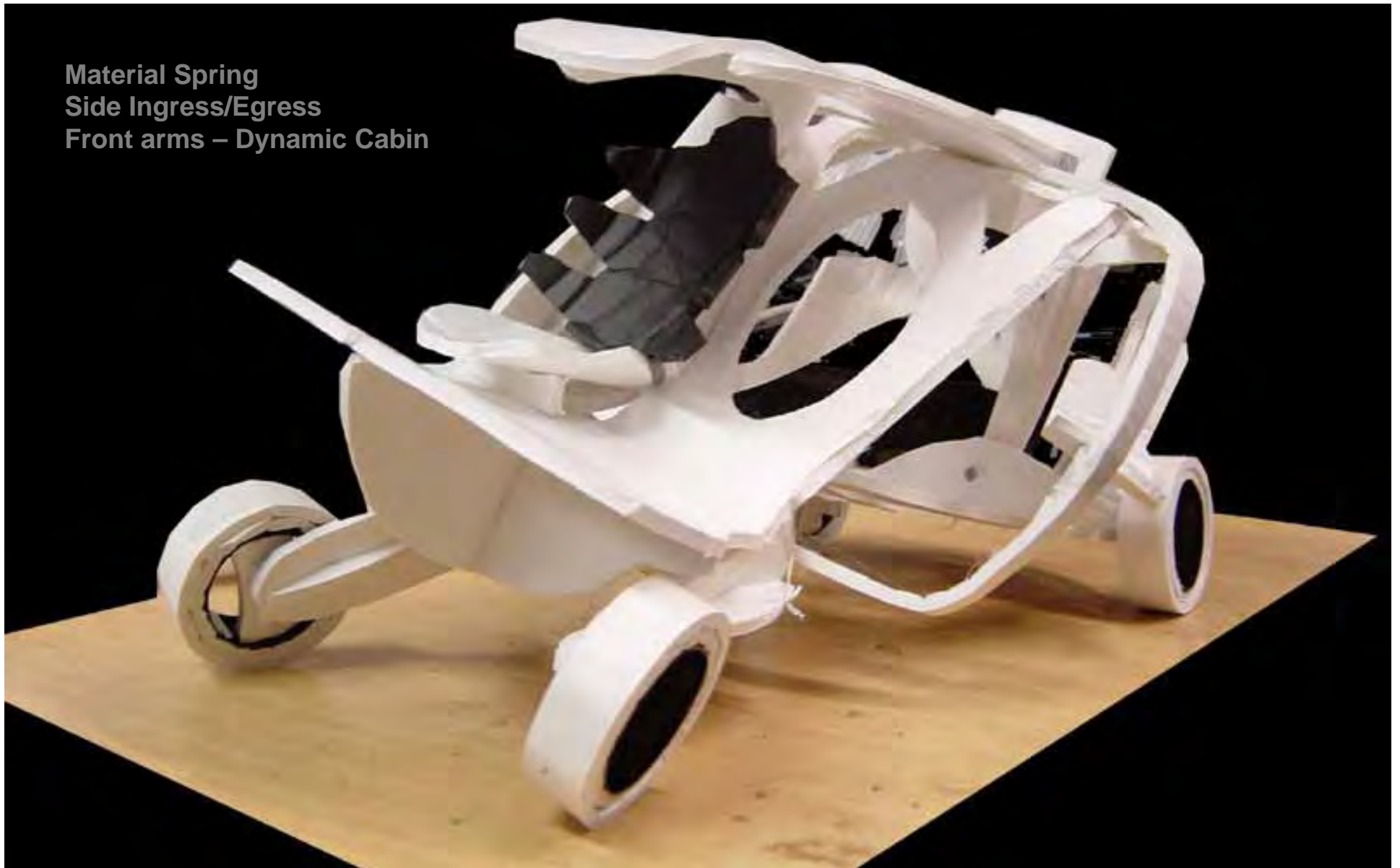
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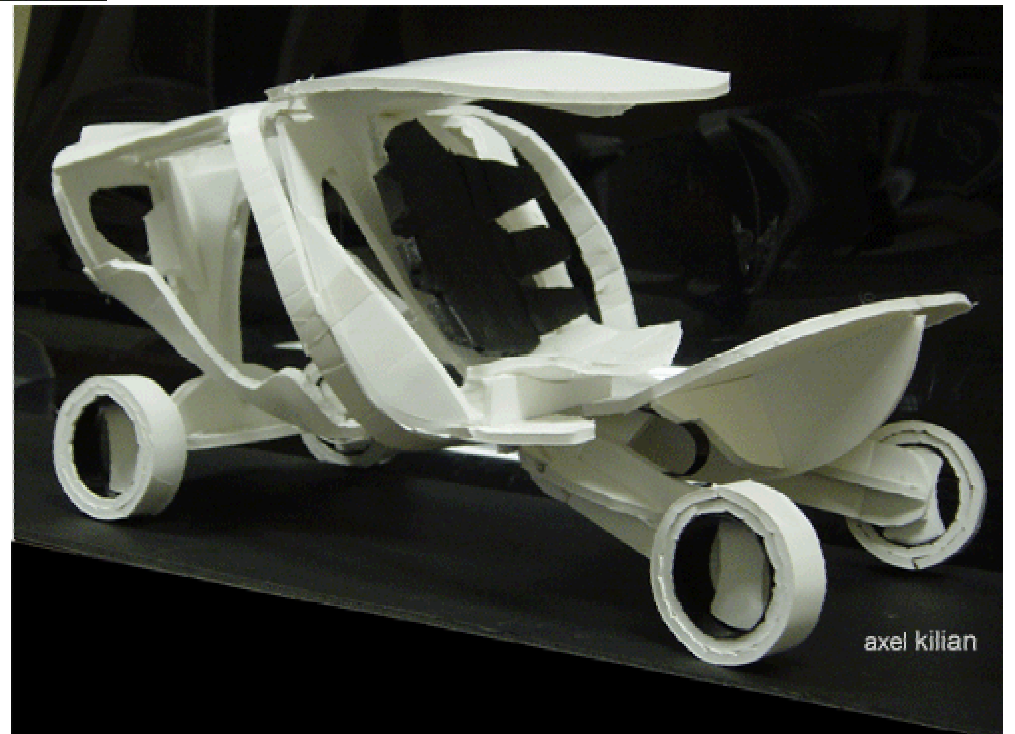
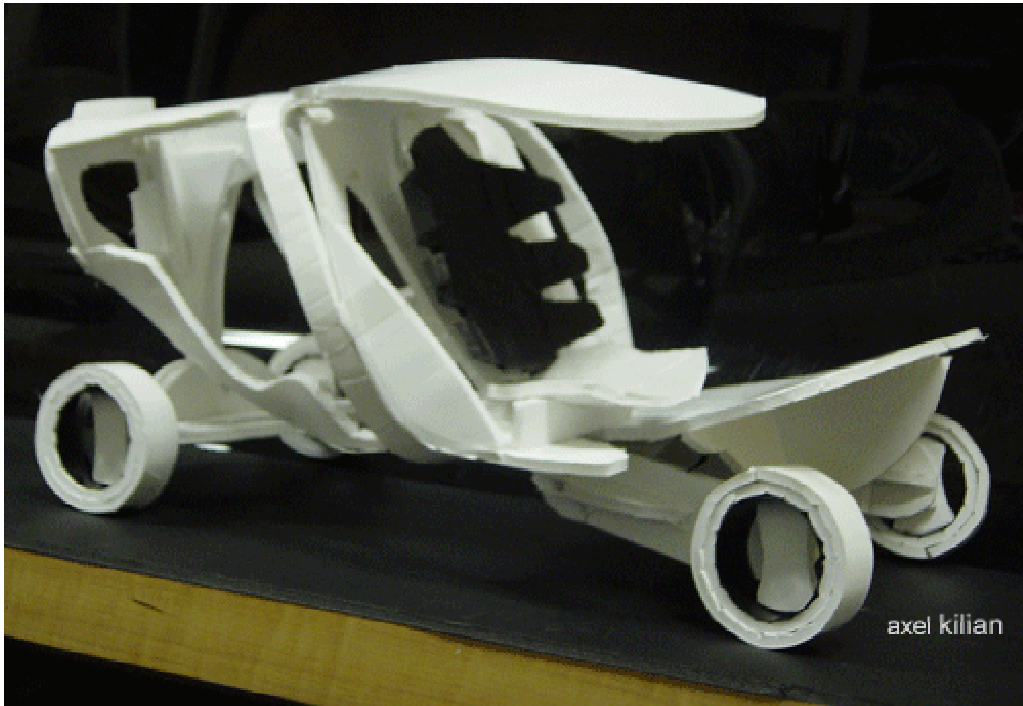


The Blahnik

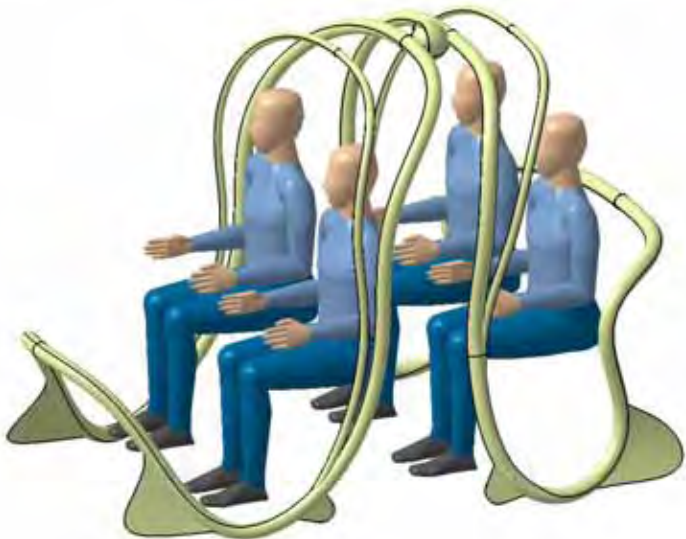
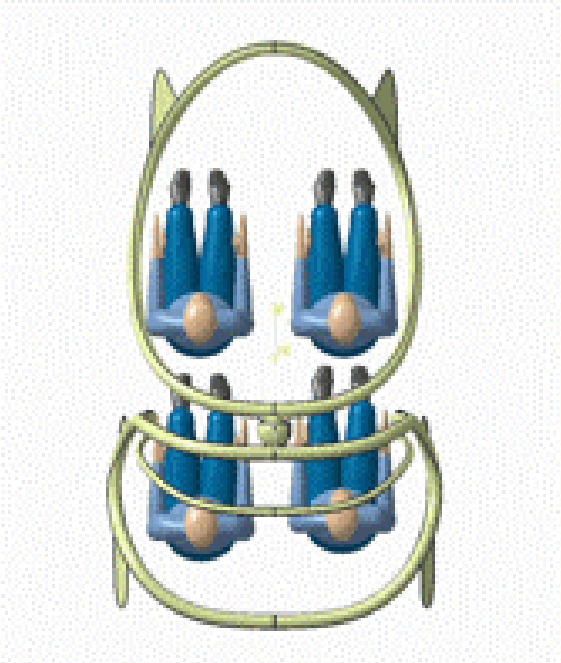
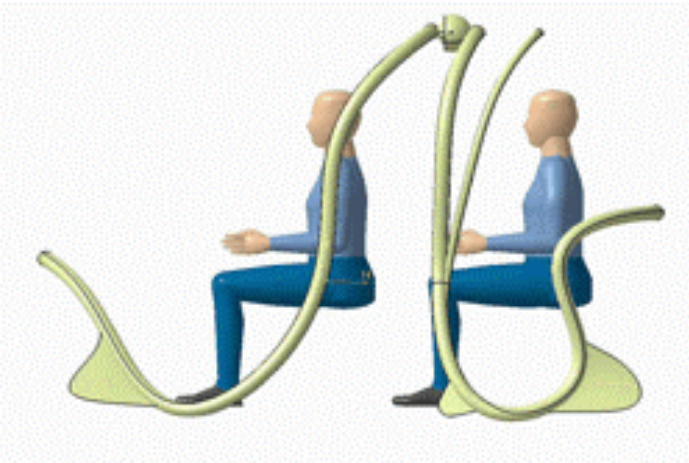
/ Axel Kilian

Material Spring
Side Ingress/Egress
Front arms – Dynamic Cabin





The Basket case / Will Lark



Dampening material placed between frame
Side & front Ingress/Egress
Twisting & Rocking frame – Dynamic Cabin

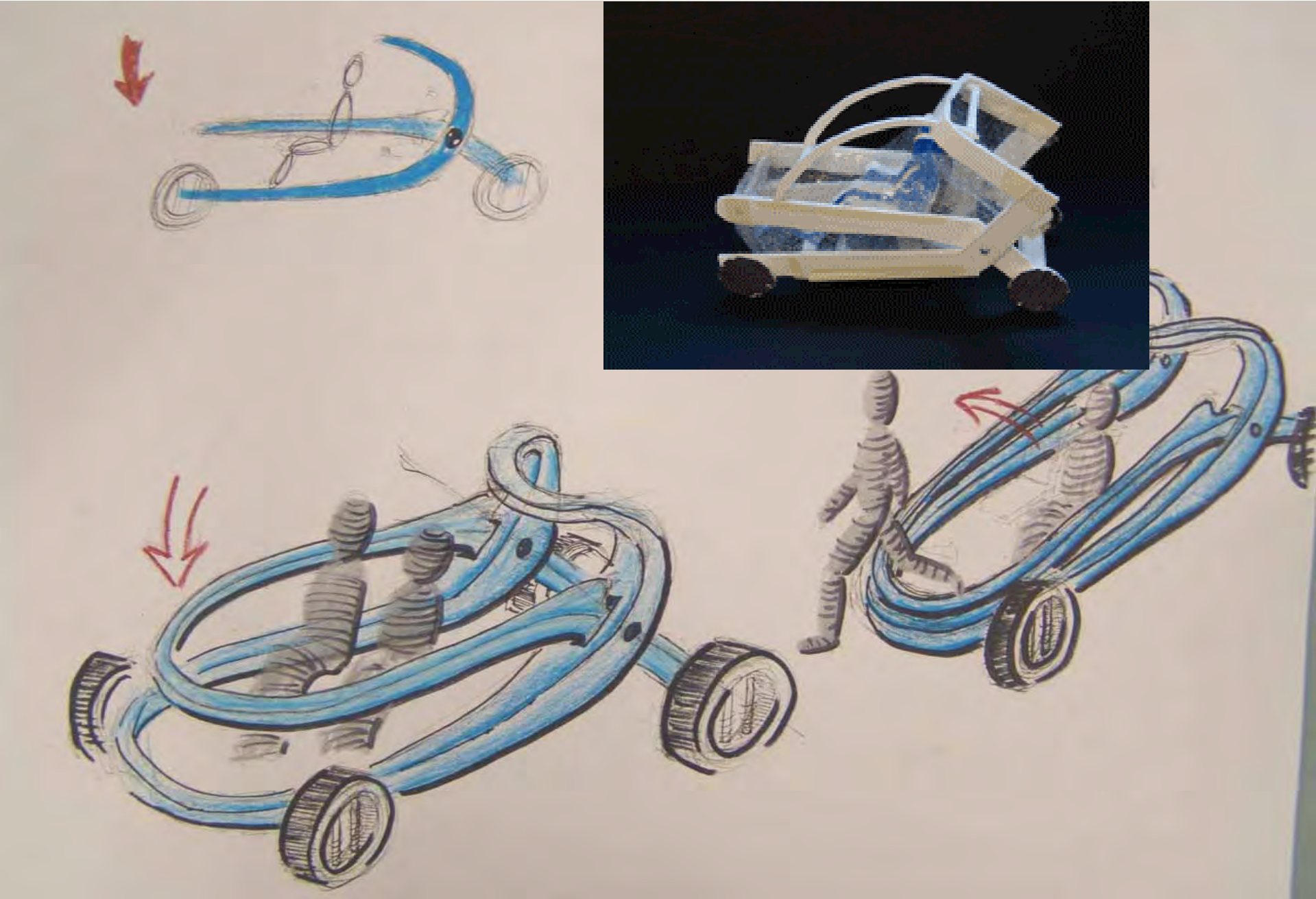


The Basket case / Will Lark



The Gator

/ Will Lark





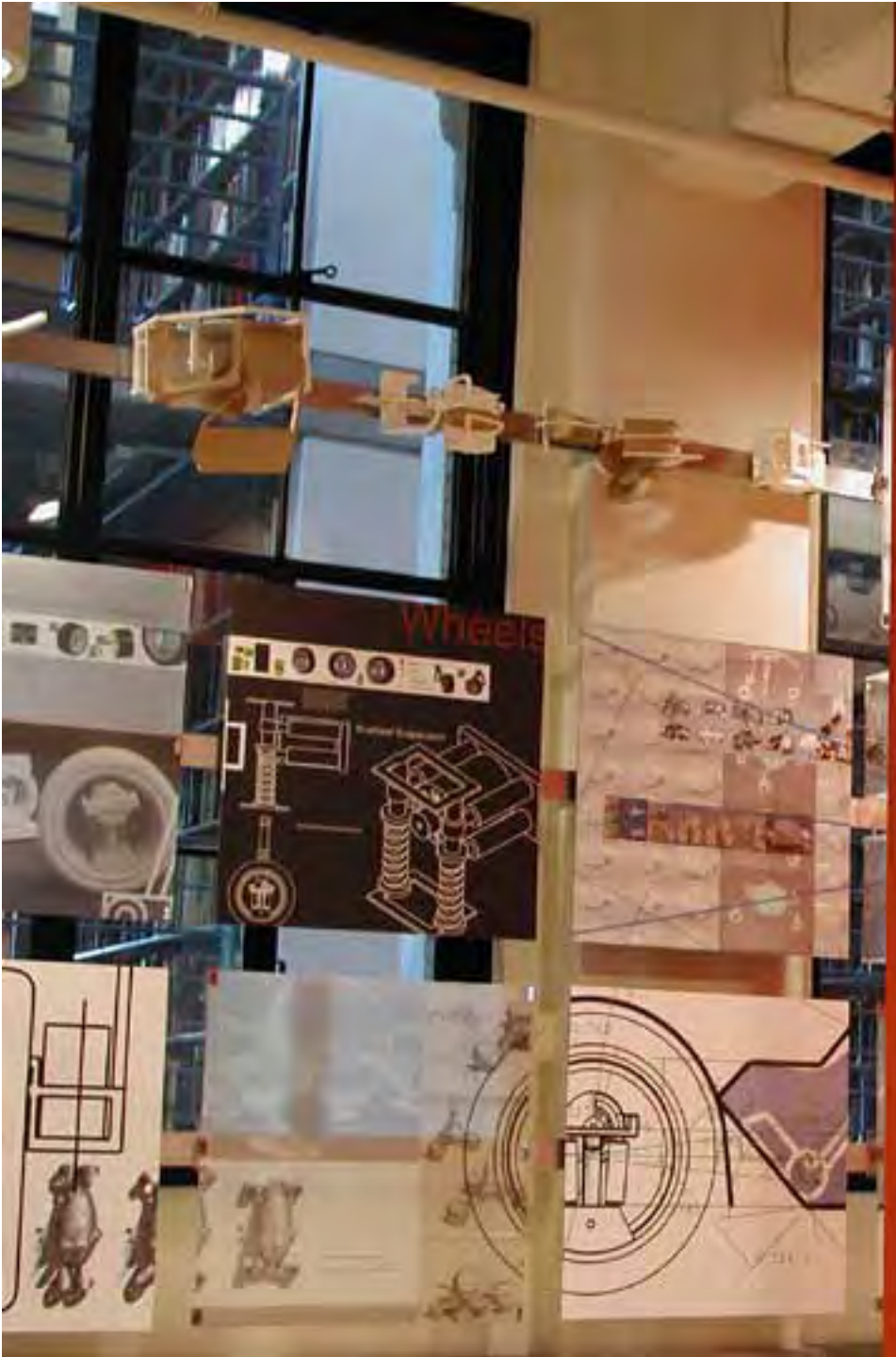




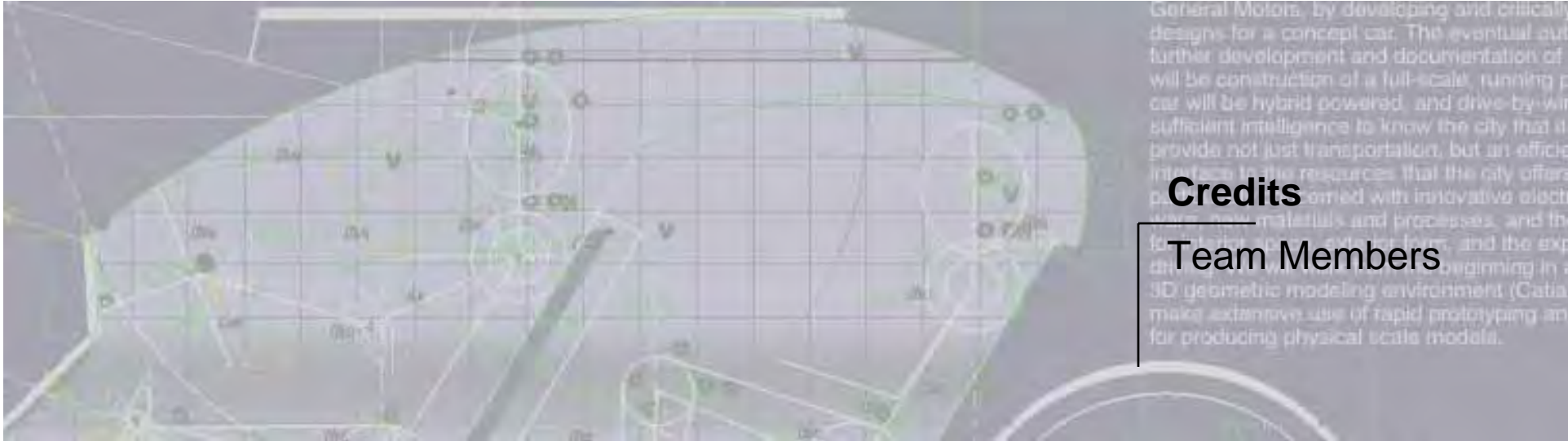












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