



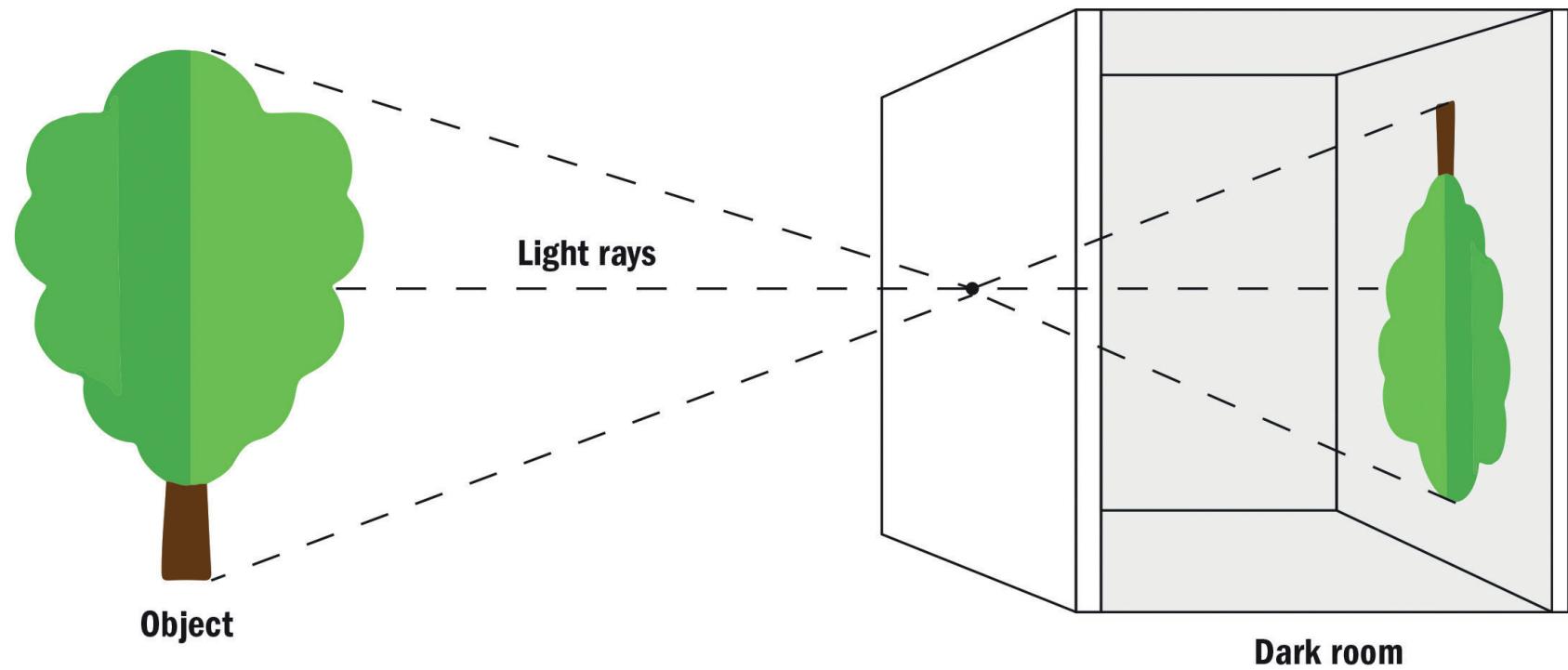
administration • technologie • santé

Digital photography

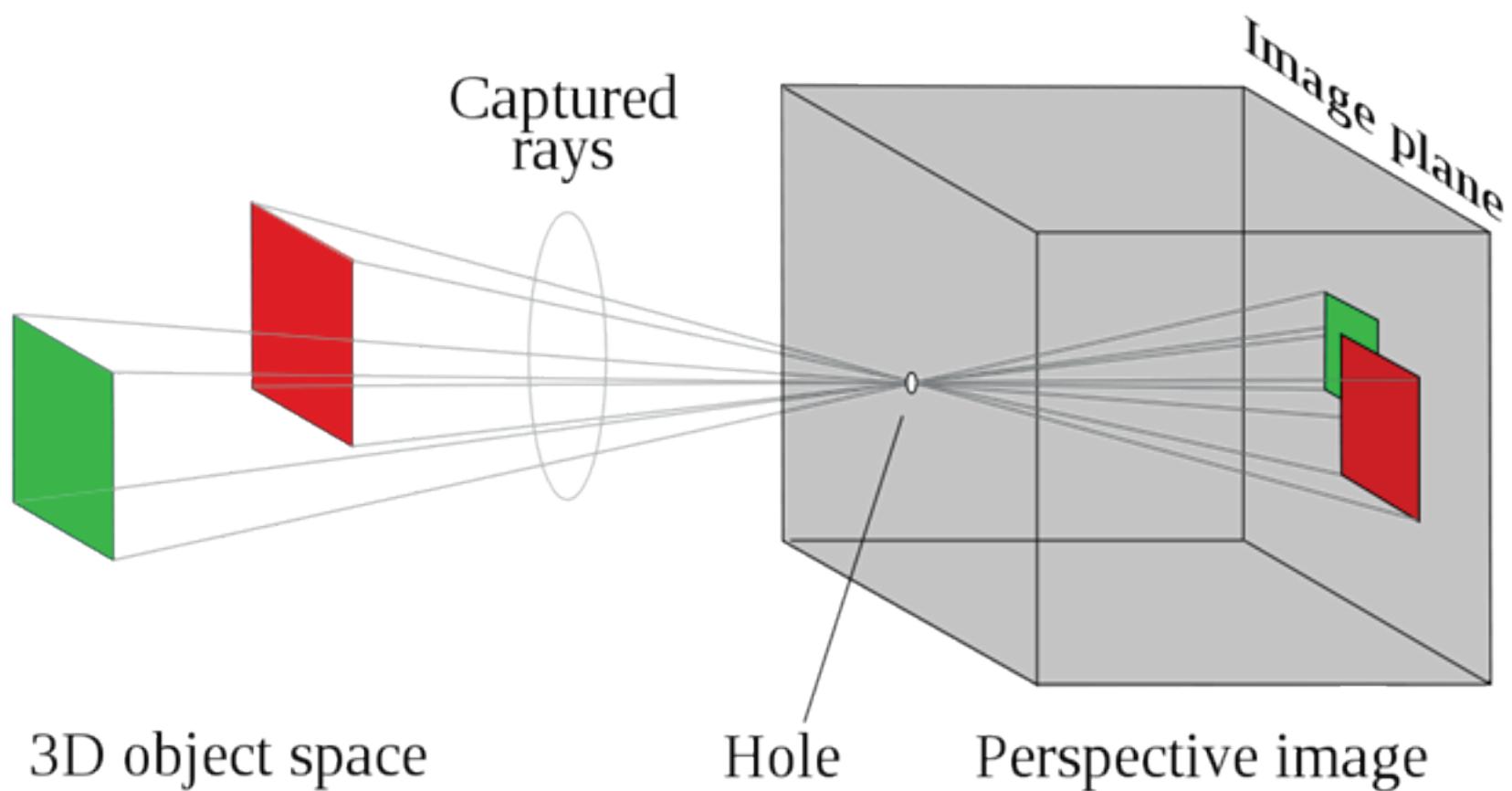
(420-PHN-ID)

Class 01

Camera Obscura



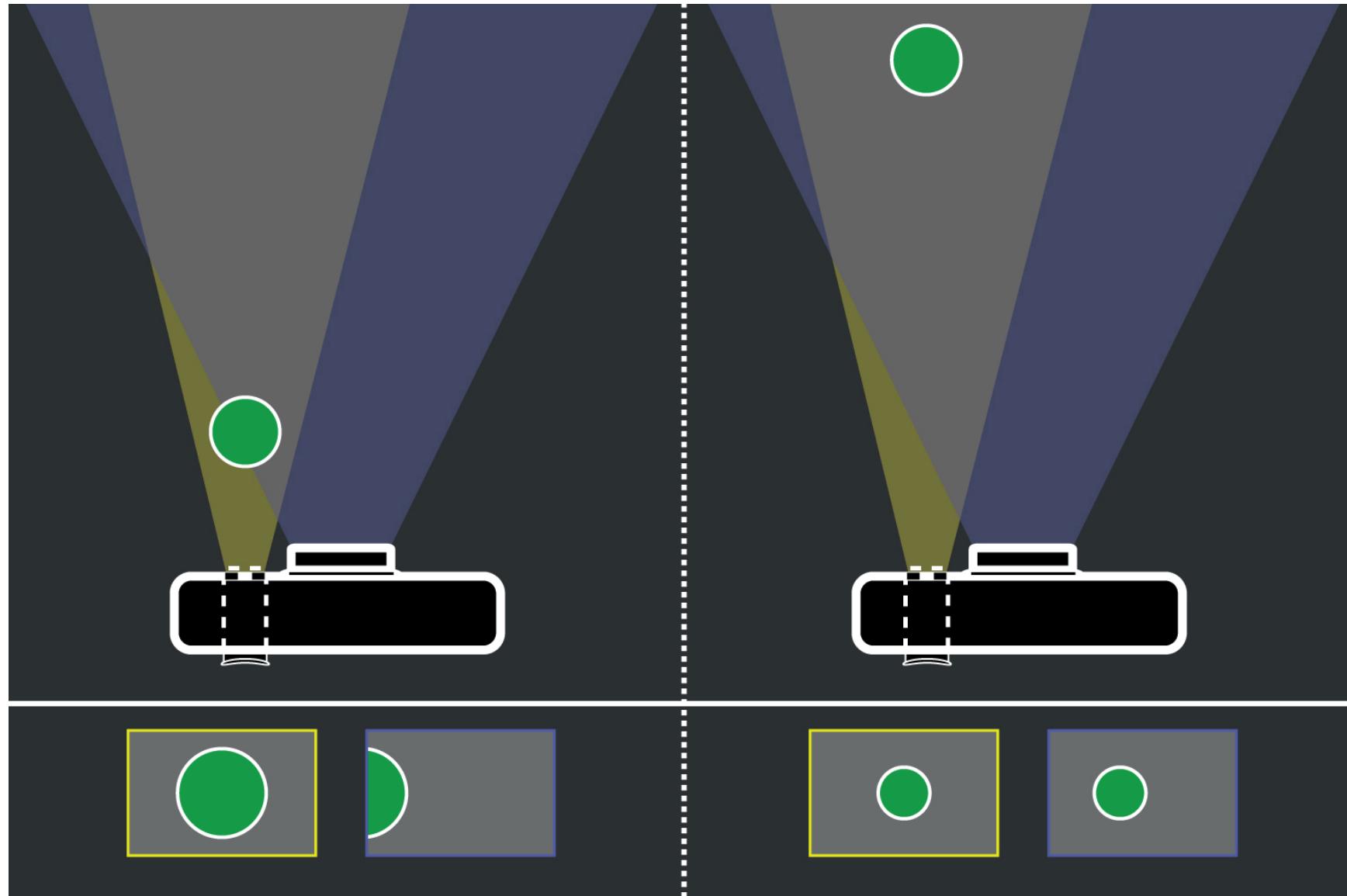
Camera Obscura



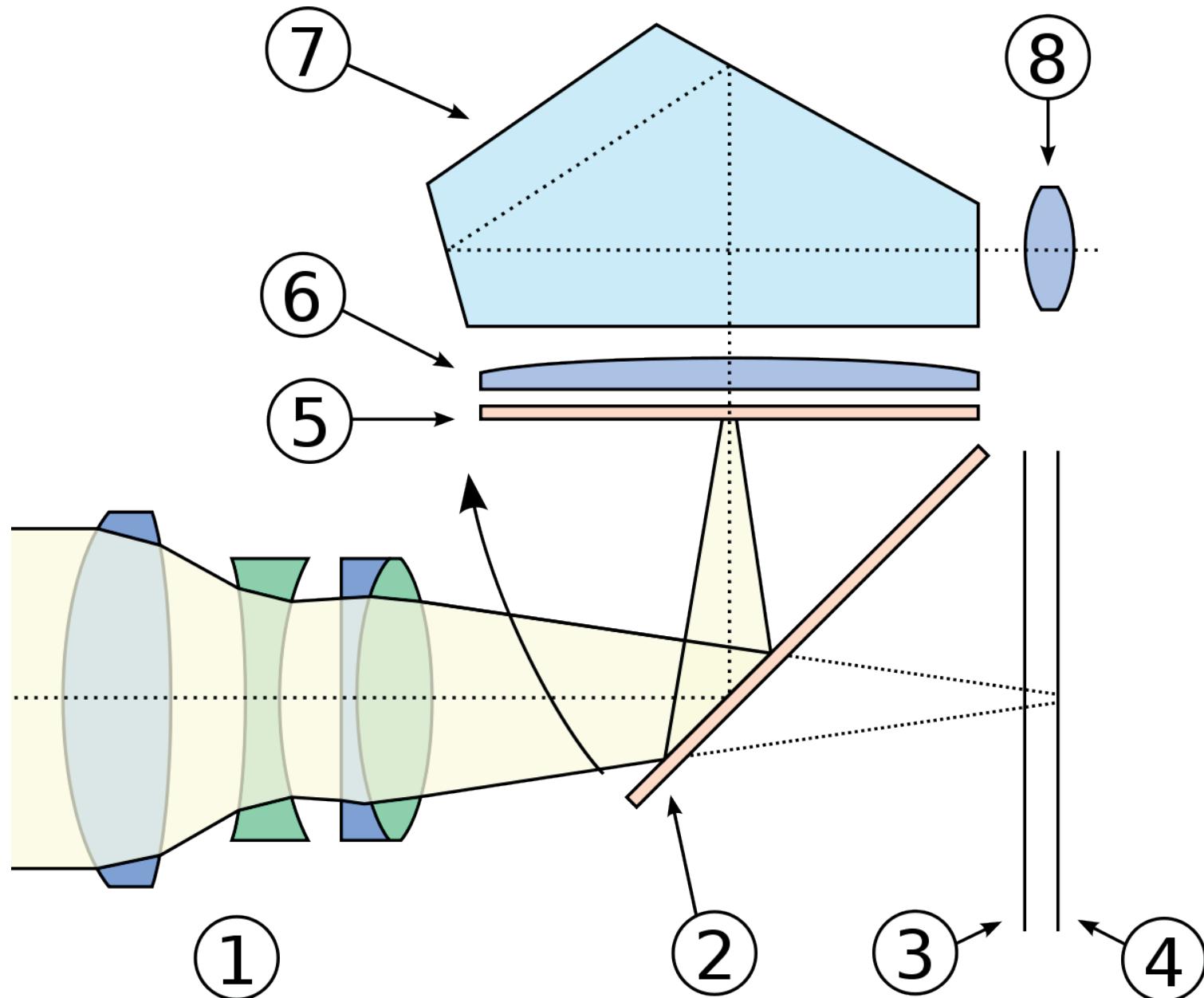
Point and shoot cameras



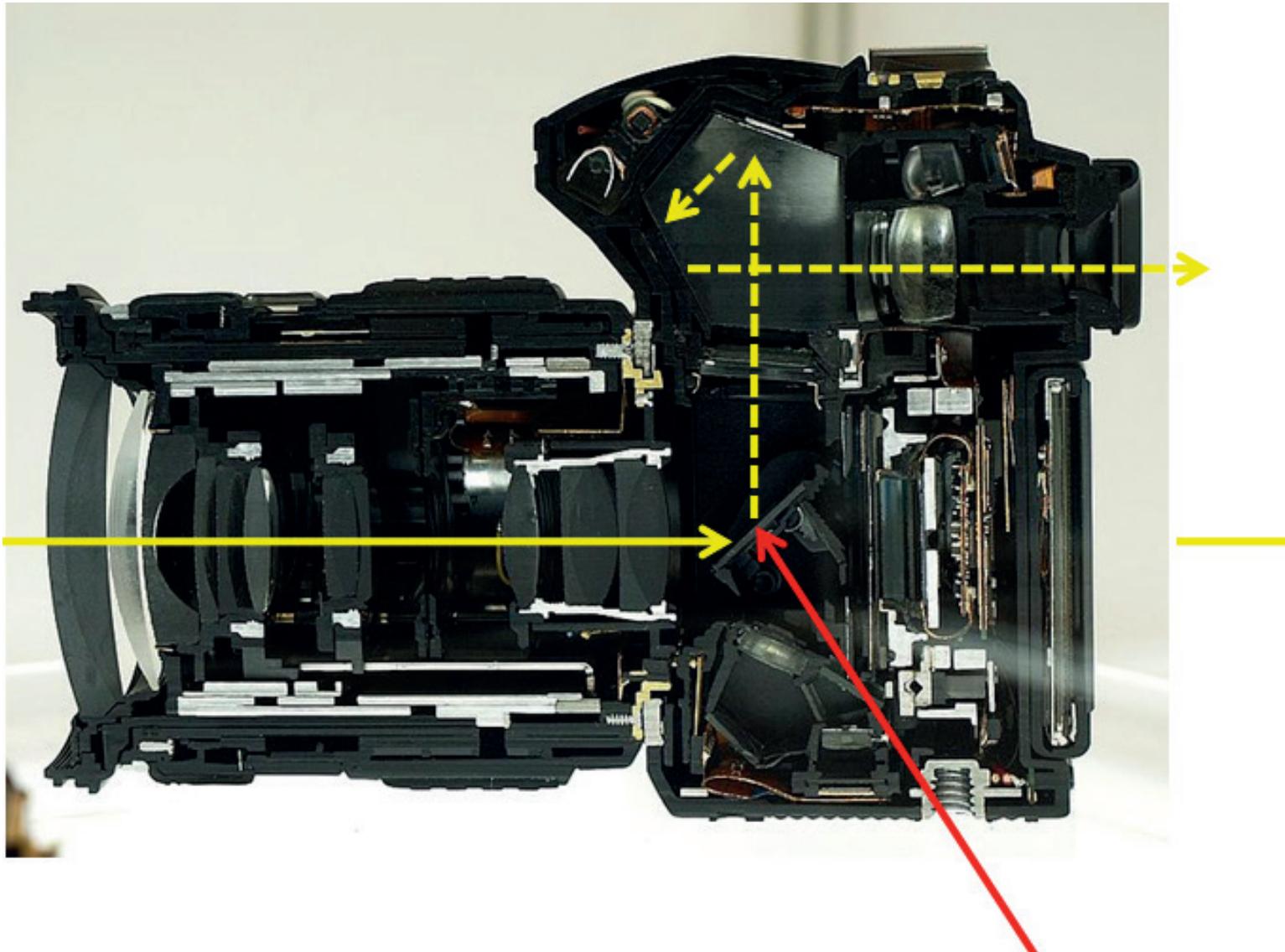
Parallax correction



Reflex (SLR / DSLR)

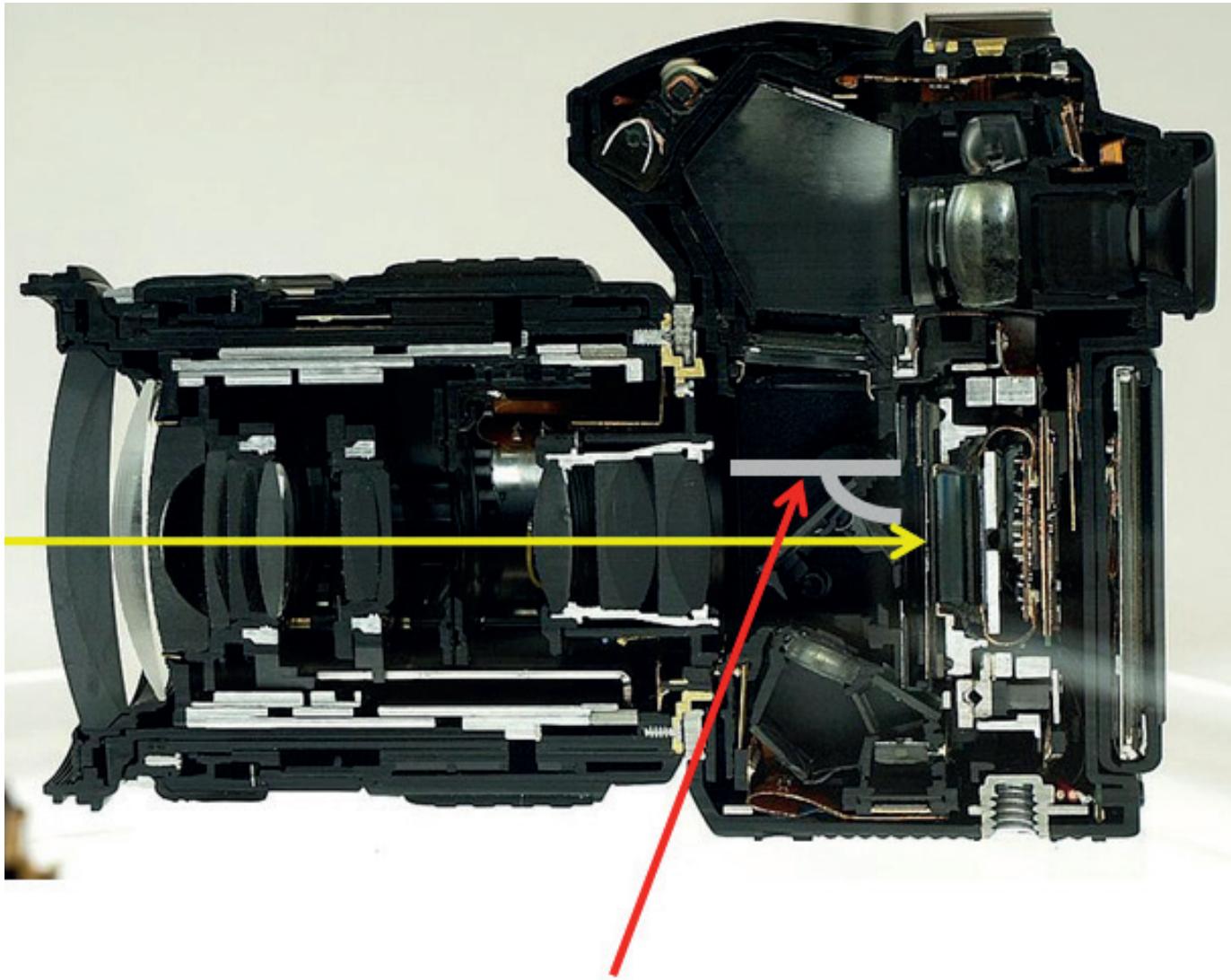


Reflex (SLR / DSLR: mirror down)



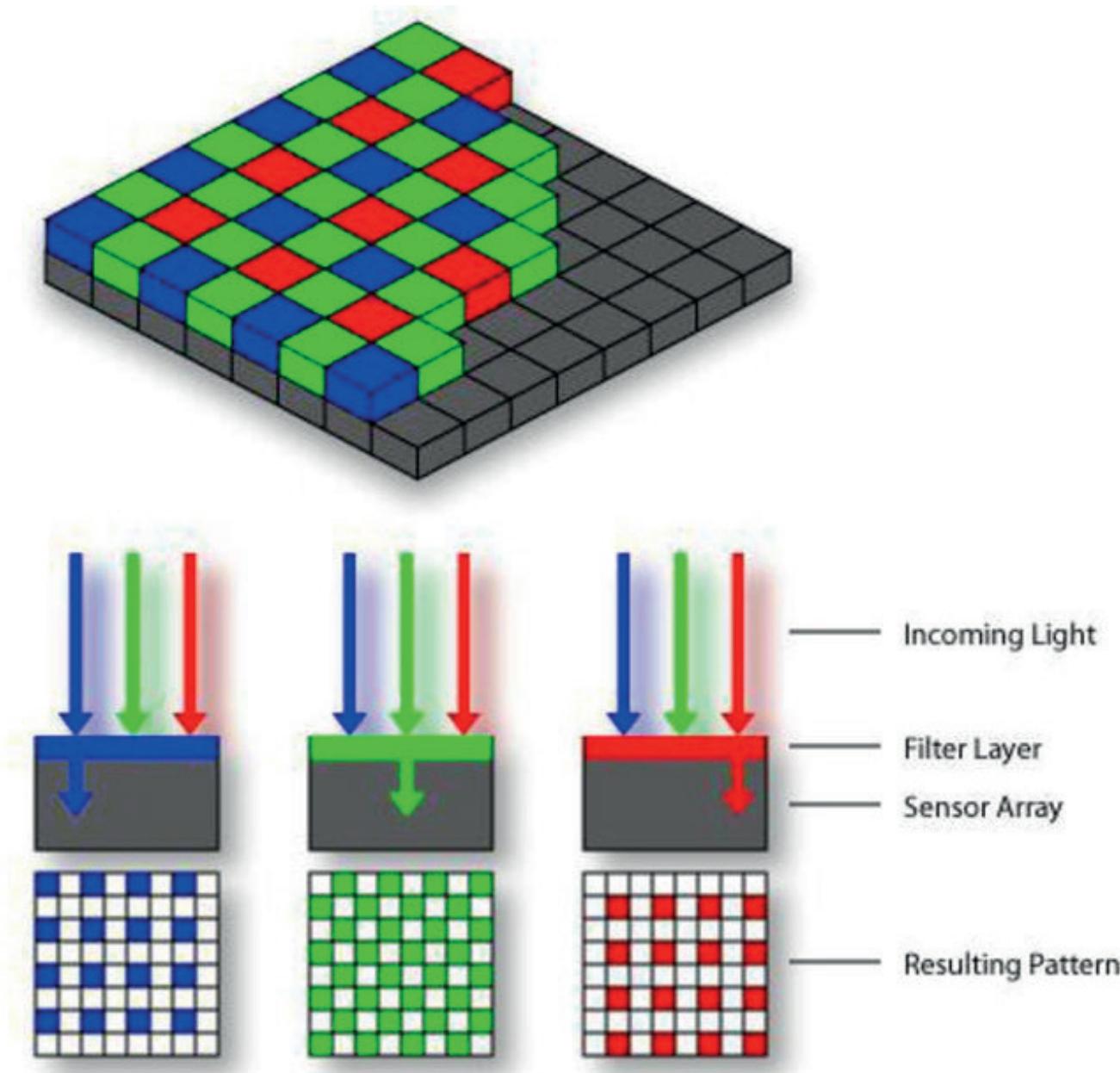
Reflex mirror is down

Reflex (SLR / DSLR: mirror up)

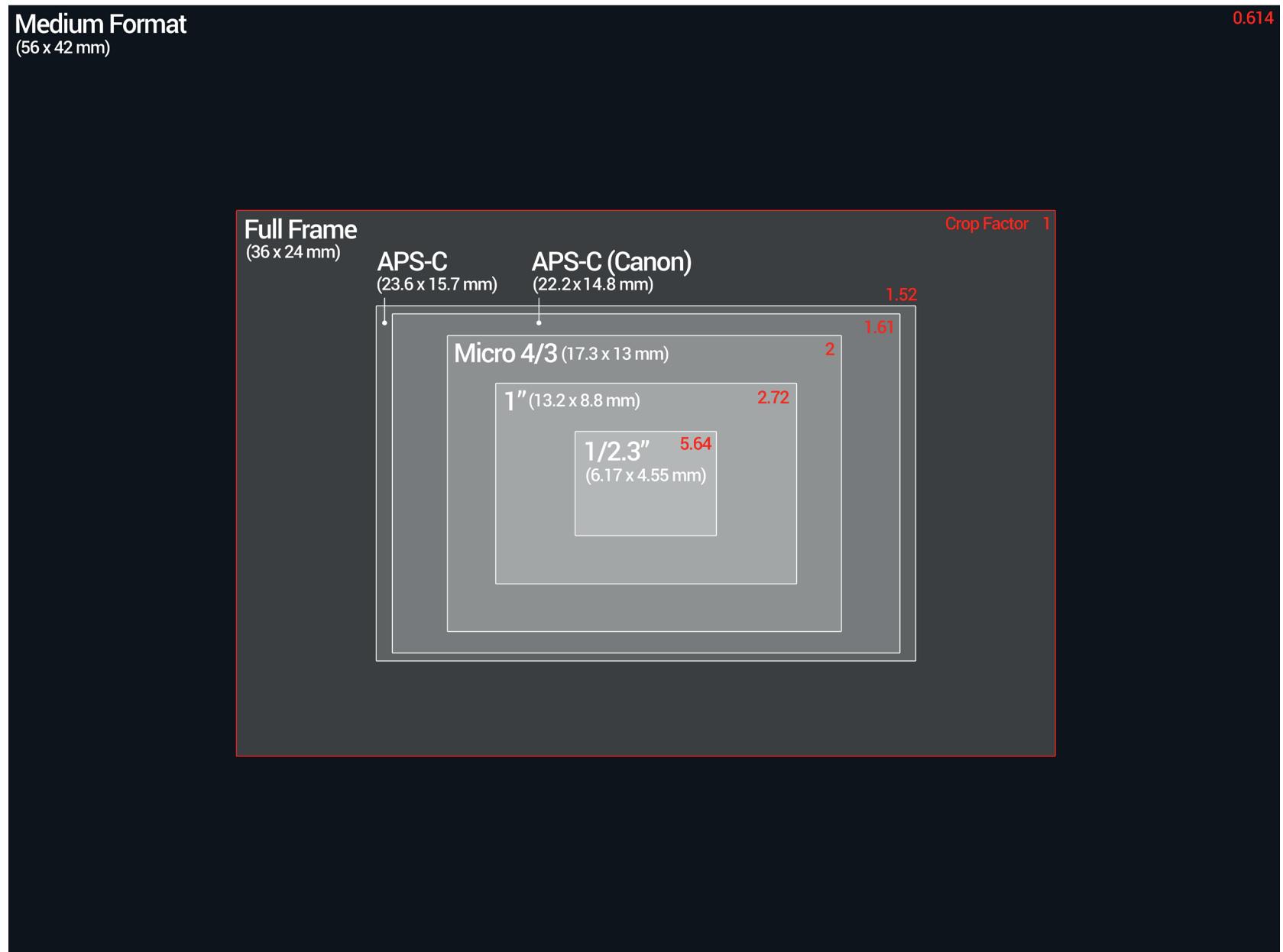


Reflex mirror is up,
exposing image sensor

Sensor



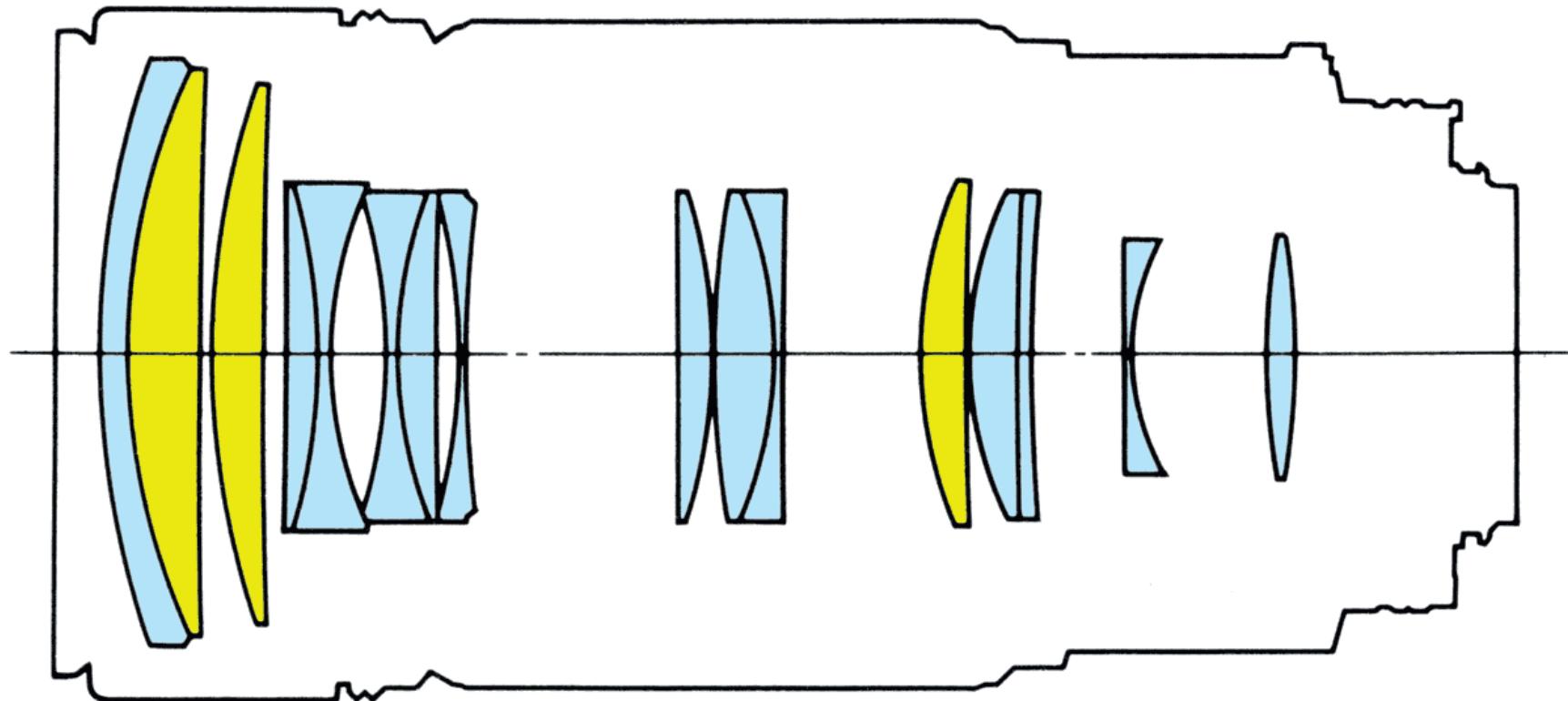
Typical sensor sizes



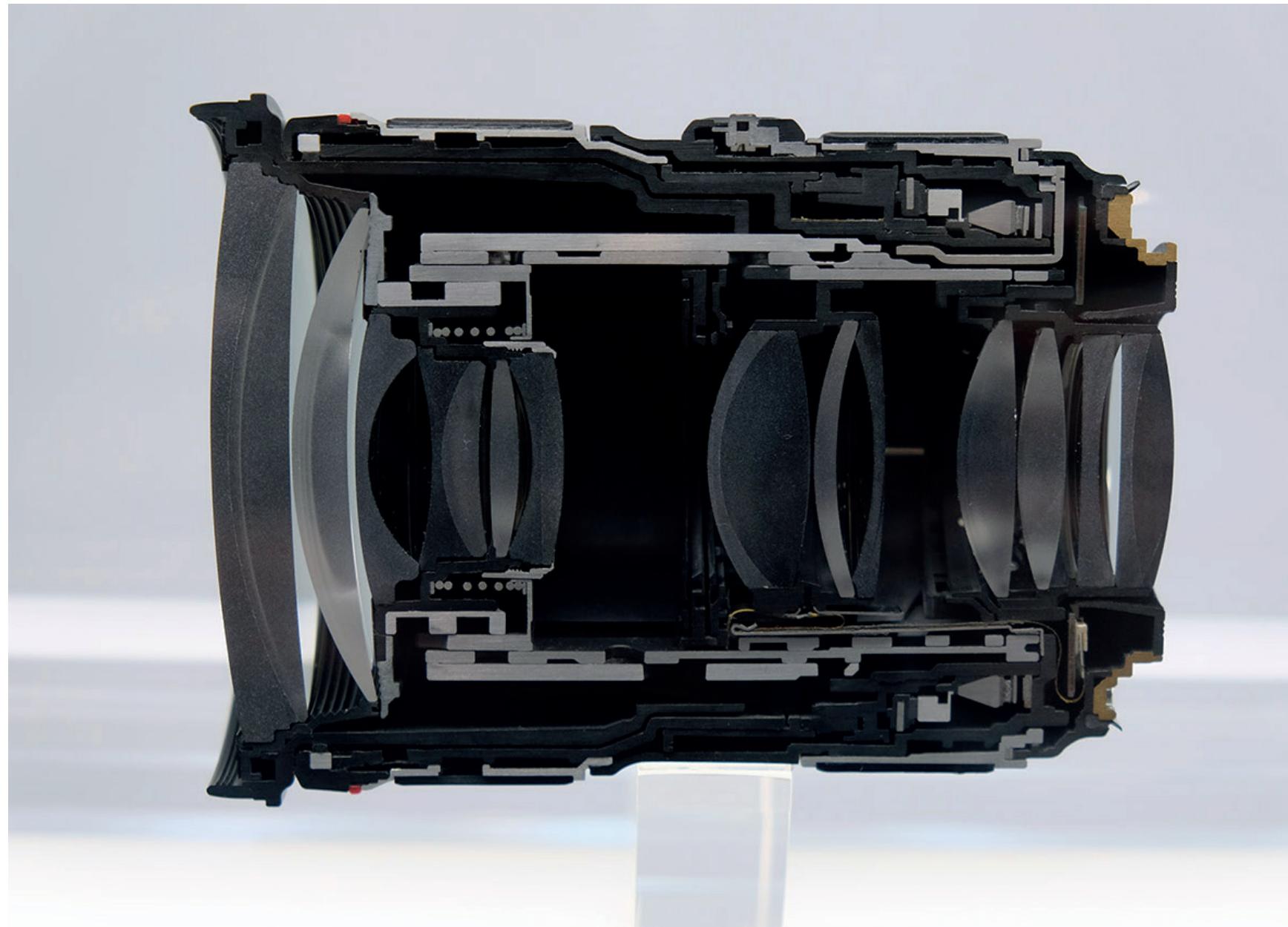
Lenses



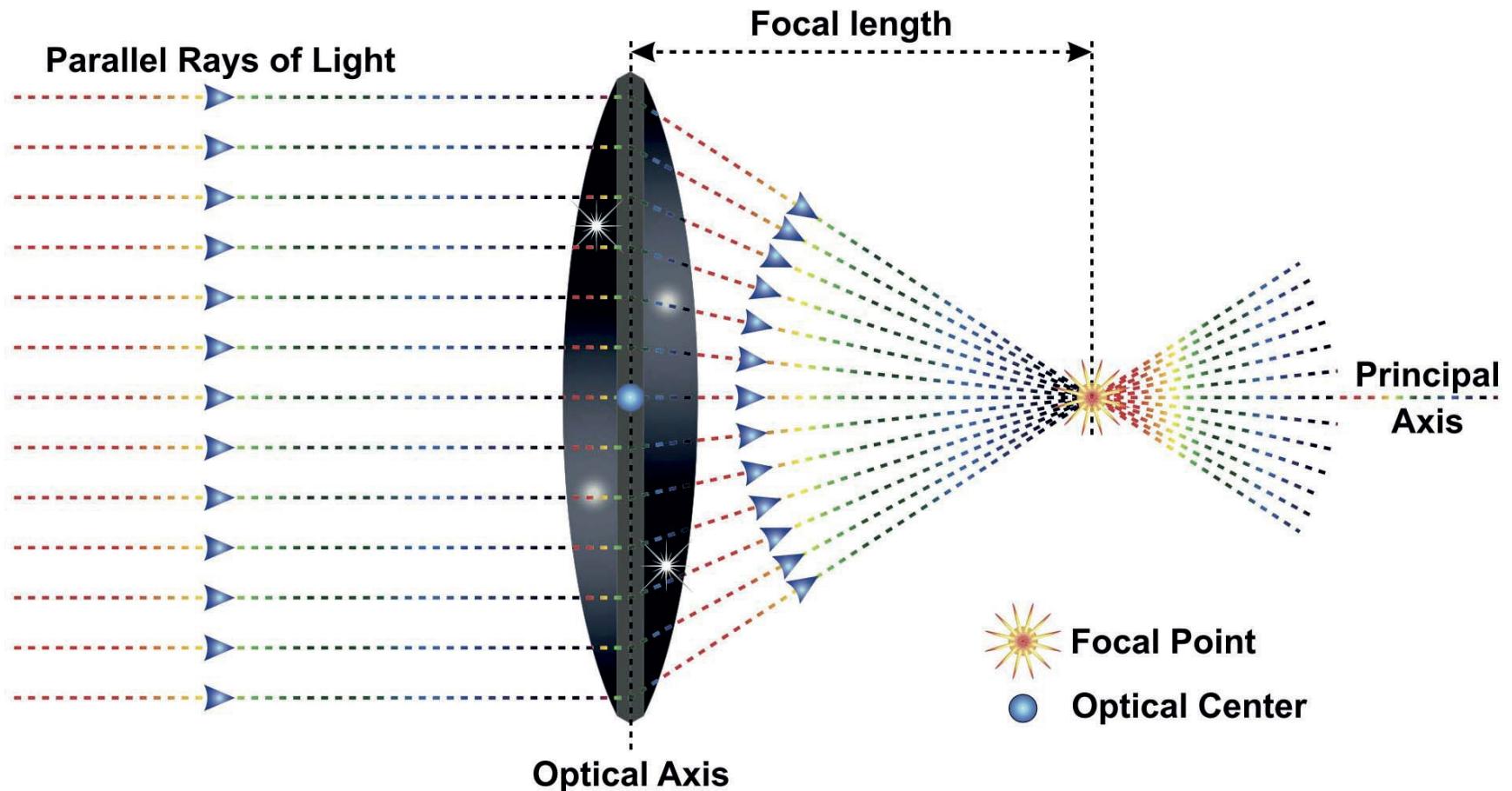
Lens: components



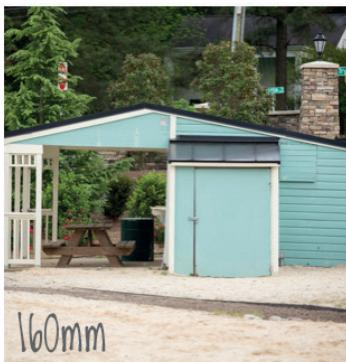
Lens: components



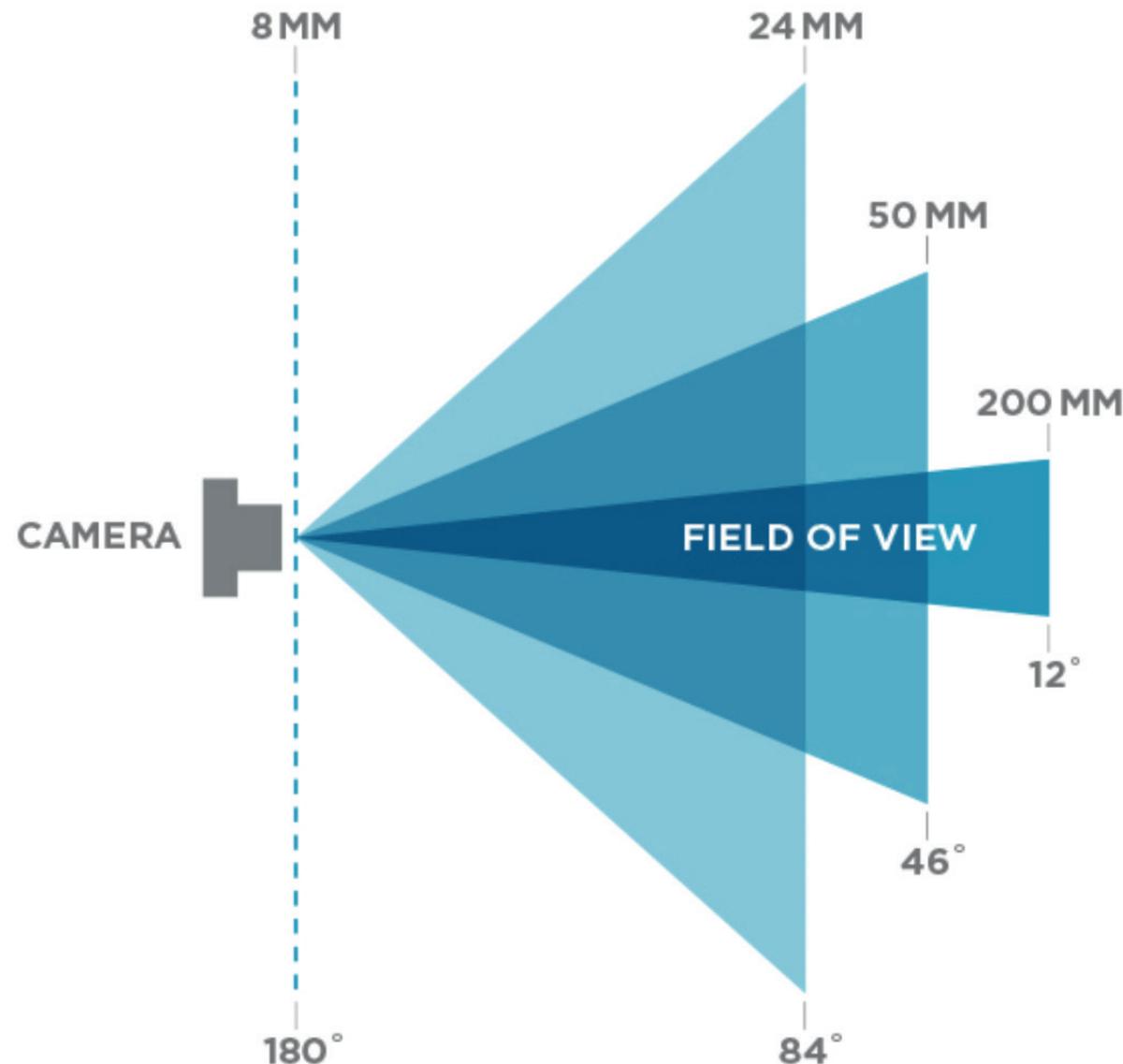
Lens: light rays' convergence



Lens: focal length



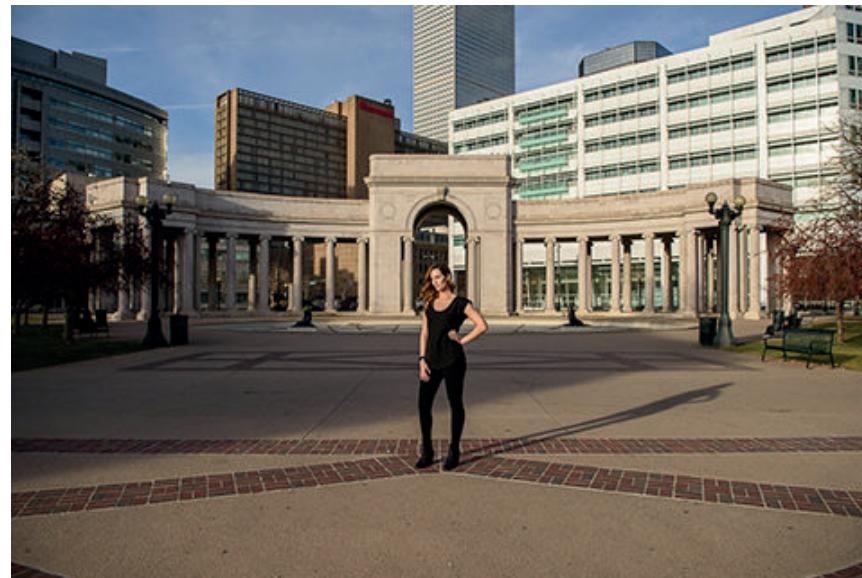
Lens: focal length / angle



Lens: long focal (compression effect)



Lens: long focal (compression effect)



Focal Length: 24mm



Focal Length: 50mm

Lens: long focal (mirage effect)



© Joe Orman

Lens: short focal (distorted perspective)



Lens: short focal (distorted perspective)



Lens: short focal (vignetting)



Lens: aperture



Shutter speed

Range of Shutter Speeds

(and their uses)

- 1/8000 second
 - 1/4000 second
 - 1/2000 second
 - 1/1000 second
 - 1/500 second
 - 1/250 second
 - 1/125 second
 - 1/60 second
 - 1/30 second
 - 1/15 second
 - 1/8 second
 - 1/4 second
 - 1/2 second
 - 1 second
 - 2 seconds
 - 4 seconds
 - 8 seconds
 - 15 seconds
 - 30 seconds
-
- The diagram illustrates the range of shutter speeds by grouping them into four categories: Fast, Moderate, Slow, and Very Slow. Each category is preceded by a colored curly brace on the left side of the list. The categories and their descriptions are:
- Fast Speeds** (Red brace): For stopping action.
 - Moderate Speeds** (Green brace): Handholding Generally Ok.
 - Slow Speeds** (Blue brace): Use a Tripod.
 - Very Slow Speeds** (Purple brace): For Creating Blur or Trails.

Shutter speed



1/500



1/250



1/125



1/60



1/30



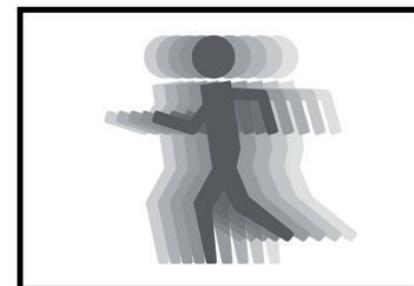
1/15



1/8

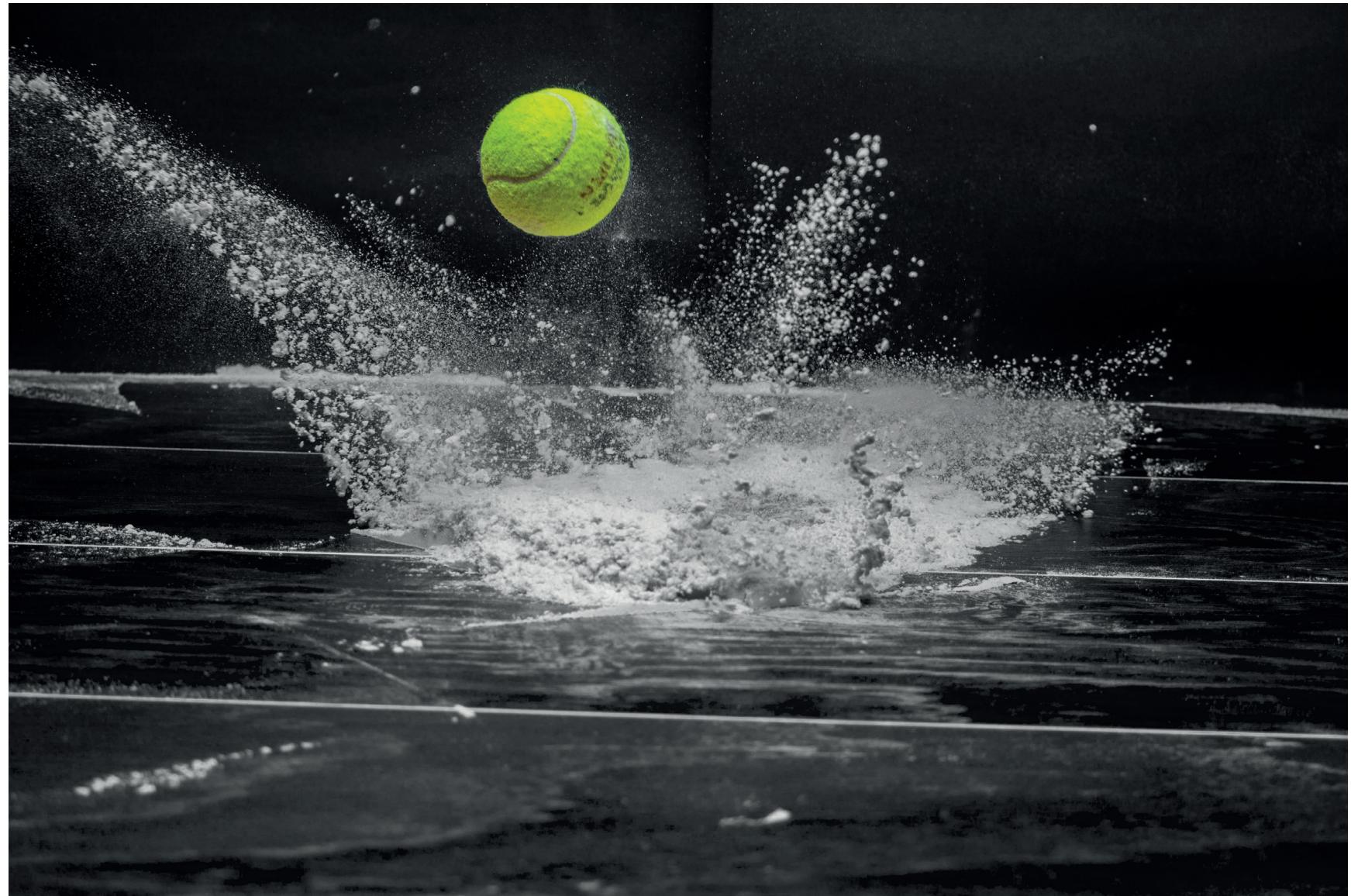


1/4



1/2

Fast shutter speed



Slow shutter speed



Slow shutter speed



Slow shutter speed



Interrelation between ISO, aperture and shutter

